The Mining Journal
RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 806.—Vol. XXI.] LONDON, SATURDAY, FEBRUARY 1, 1851. [Price 6d.

TO IRON MERCHANTS, MILLWRIGHTS, ENGINEERS, IRONFOUNDERS, MACHINEMAKERS, SMITHS, &c.

MR. EDWARD RAISBECK begs to announce to his friends and the trade generally, that he has received instructions from Mr. Thos. Dixon, who is retiring from the iron trade, to OFFER FOR UNRESERVED SALE, on Monday, Tuesday, Wednesday, and Thursday, the 3d, 4th, 5th, and 6th days of February, 1851, at his IRON WAREHOUSE, THORNTON-ROAD, BRADFORD, upwards of

FIVE HUNDRED TONS OF BAR, ROD, HOOP, & SHEET IRON,

of every description, including shafting of all sizes, up to 6 inches; angle-iron, boiler-plate, &c.; 20 tons of superior spindle steel; 10 tons of single and double shear (L) and cast-steel, in great variety.—Also,

TWO THOUSAND TONS OF PIG-IRON,

of first-rate brands, including Yorkshire, Scotch, and Hæmatite; a large assortment of anvils, bellows, tue irons, vices, washers, chains, scale-beams, blocks of all sizes, from half-inch and upwards, patent arms and arm moulds, hammers and hammer moulds, share moulds, and every other article connected with the trade; also, 18 sets of contractors' railway wheels and axles, 2 large foundry cranes, capable of lifting 20 tons each, large quantity of foundry models, 1 horizontal press for railway wheels, 1 spoke bending machine, large machine for bending railway tyres, horse, cart, and gears, together with various other articles too numerous to insert.

Sale to commence each day at Ten o'clock.

N.B.—The auctioneer can with confidence recommend the above valuable stock, knowing it has been purchased on the most advantageous terms, and selected from the best markets.—Catalogues may be had six days previous to the sale, on application at the Sun Inn, Bradford; the George Inn, Huddersfield; the Royal Hotel, Dewsbury; or of the Auctioneer, at the Nag's Head Inn, Vicar-lane, Leeds.

Approved bills will be taken, if required, for amounts exceeding £20, adding the usual interest.—The WAREHOUSE TO BE LET, and the FIXTURES to be taken at a FAIR VALUATION. 1

TAW VALE RAILWAY—SECOND SALE.

MR. G. HEARSON respectfully announces that he is instructed by Mr. Thorne, late contractor for the works on the above railway, to OFFER FOR SALE, BY AUCTION, at the Railway Station, BARNSTAPLE, on Thursday, the 6th of February, 1851, the REMAINDER of the

MATERIALS AND PLANT

that were provided for the contract, the whole of which must be sold without reserve.

The MATERIALS comprise about 2500 feet of Paynised MEMEL and YELLOW PINE TIMBER, the greater part in lengths from 40 to 60 feet; about 2000 feet of ashlar stone, and several lots of firewood.

The PLANT comprises a LOCOMOTIVE ENGINE and TENDER, by Chapman, very little worn, particulars as follow:—inside cylinder, 14 inches in diameter and 18-inch stroke; driving wheels, 6 feet diameter; leading and trailing wheels, 4 feet; strong copper fire box, nearly new; 111 tubes, 7½ feet long, outside diameter, 2 inches. The tender is constructed to hold 600 gallons, wheels 4 feet in diameter. A patent lifting-jack, 80 railway earth waggons, 20 sets of horse harness, two good timber waggons, a quantity of waggon steel springs, five cast-iron monkeys for pile engines, a lead pump and pipe, a malt mill, a bean mill, part of a shop counter, with a desk and drawers, several empty casks, gas pipes, and various other articles.

Acceptances by parties approved by the auctioneer will be taken in payment at three months for all sums above £30, and at six months for all sums above £100. The sale to begin by 11 o'clock in the forenoon. 2

RUABON, NORTH WALES.

TO COAL AND IRONMASTERS.—TO BE LET, ON LEASE, for a long term, and entered upon immediately, that well-known and valuable COLLIERY, now at work, called the PLAS MADOC COLLIERY, in the parish of RUABON, in the county of DENBIGH.—The BEDS of COAL and IRONSTONES are of superior quality, and raised at a moderate expense. The land consists of about 200 acres, only a small portion of which has been worked.

A private branch railway from the colliery intersects the land to the main line of the Shrewsbury and Chester Railway, from which places the colliery is nearly equi-distant.

The FIRE-BRICK CLAYS are of excellent quality.—The Shropshire Union Canals pass close to the property.

The MACHINERY and PLANT to be taken at a VALUATION.

The Estate is surrounded by the extensive works now open, belonging to the British Iron Company and other parties, and is distant 1 mile from Ruabon, and about 4 from Llangollen, and 6 from Wrexham.

Plans of the estate, with working plans of the mines, may be seen, and further particulars obtained, on application to Mr. H. Nicholson, solicitor, 6, Furnival's Inn, London. 3

EXTENSIVE IRON-WORKS AND MINERAL LEASES FOR SALE, BY PRIVATE BARGAIN.—The BLAIR IRON-WORKS, belonging to the AYRSHIRE IRON COMPANY, situated in the parish of DALRY and county of AYR, consisting of TWO BLOWING ENGINES, FIVE BLAST-FURNACES, FOUNDRY, PIT ENGINES, and other requisite utensils for the furnaces and working the minerals, all in working order, besides nearly TWO HUNDRED WORKMEN'S HOUSES.

The extensive MINERAL FIELDS consist of BLACKBAND, IRONSTONE, COAL, LIMESTONE, and FIRE-CLAY, held under long leases, at moderate fixed rents and royalties, all in the immediate neighbourhood of the furnaces; and the works having a connection with the Ayrshire Railway, command great facilities for transit and shipping of the produce. There is a large STOCK of IRONSTONE on the ground, which may be had at a valuation, and considerable progress has been made in the

ERECTION OF MALLEABLE IRON-WORKS,

in connection with the furnaces, which may also be had.—The above are well worthy the attention of capitalists and parties in search of mineral fields.

For further information apply to Mr. Brown, 35, St. Vincent-place, Glasgow. 4

TO RAILWAY COMPANIES.—FOR SALE, BY PRIVATE CONTRACT, TWO NEW first-class LOCOMOTIVE ENGINES and TENDERS, cylinders 15 inches diameter, strokes 20 inches, crank axle, inside cylinders, 18 inches from centre to centre of cylinders, to prevent oscillation; outside malleable iron framing.

TWO PAIRS of 5½ feet DRIVING WHEELS, coupled.

ONE PAIR of 4 feet BEARING WHEELS, in front—BOILER, 10 ft. long in the body.

139 2-inch BRASS TUBES, COPPER FIRE-BOX, and STAYS.

TENDER, 1000 gallons, with large coke space, on three pairs of 3-feet malleable iron wheels, with double brakes.

We will be glad to treat with any company on liberal terms, and meet their wishes as to mode and manner of payments.—Applications to be addressed to

Quarry Field Engine-Works, Gateshead. JOHN COULTHARD & Co. 5

STIRLING'S PATENTS FOR IMPROVEMENTS IN IRON.—1. TOUGHENED CAST-IRON, which is double the strength of ordinary cast-iron, and only from 10s. to 12s. per ton extra.

2. ANTI-LAMINATING IRON, for RAILS and TIRES, &c., at an extra price of from 7s. 6d. to 10s. per ton. Also IMPROVEMENTS in the MAKING of WROUGHT-IRON—saving one process to the manufacturer.

Further particulars and terms of license, &c., may be obtained on application to Mr. Jee, civil engineer, No. 6, John-street, Adelphi, London; also from the London agents, Messrs. GARDEN and MACANDREW, 34, Dowgate-hill; and the Scotch agents, Messrs. W. and J. H. Johnson, 166, Buchanan-street, Glasgow, and 20, St. Andrew's-square, Edinburgh. 6

STIRLING'S PATENT YELLOW METALS—Adapted for SHEATHING, BOLT STAVES, BOLT NAILS, DECK NAILS, as on reported by the late Mr. Owen, Supervisor of Metals to the Admiralty; also for PROPELLERS, FRAMEWORK SCREWS, PISTONS, CYLINDERS, COCKS (particularly where there is exposure to corrosion), RAILWAY CARRIAGE AXLE BEARINGS, and for all machinery subject to friction.

AGENTS.

Messrs. GARDEN & MACANDREW, 34, Dowgate-hill, London.

Messrs. JOHNSON, 166, Buchanan-street, Glasgow.

Applications for licenses and other information to be addressed to the undersigned, at Garden and Macandrew's, No. 34, Dowgate-hill. ALFRED BARRETT, Manager. 7

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 10th of the month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 20th of the month, to Malta, thence to Alexandria by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA—On the 20th and 29th of every month. CONSTANTINOPLE—On the 29th of the month. ALEXANDRIA—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th 17th, and 27th of the month.

For plans of the vessels, rates of passage-money, and to secure passages and ship cargo, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton. 8

EXHIBITION OF 1851.—T. P. AUSTIN, proprietor of PEELE'S COFFEE-HOUSE, FLEET-STREET, begs respectfully to inform his friends and the public generally, especially those interested in the forthcoming GREAT EXHIBITION, that he has recently NEARLY DOUBLED THE SIZE OF HIS ESTABLISHMENT, which will enable him to afford increased comfort and convenience to those honouring him with their patronage. The FILES OF NEWSPAPERS and PERIODICALS, for which Peele's Coffee-house is so celebrated, containing all the reports of the Royal Commissioners, will be available to those visiting this establishment.

*** The *Mining Journal*, in addition to all Publications connected with the Mining Interests, are regularly filed.—*Bed and Breakfast, 3s., or £1 per week.* 9

MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, in renewing OFFERS of SERVICE to CAPITALISTS, feels much gratified at the extent of patronage and confidence he has received hitherto, and will continue so to treat the interests of his friends in town and country as to deserve a still more important share of their orders, whether for PURCHASING or SELLING MINING SHARES.—Mr. CROFTS acts exclusively for PRINCIPALS, and will cheerfully give advice on contemplated investments, so far as his knowledge or judgment permits, either personally or by letter.

Numerous sound concerns may be safely invested in, exclusive of *dividend mines*, but the latter with a certainty, *for some years*, of 15 to 20 per cent. per annum interest.

MR. CROFTS HAS SPECIALLY FOR SALE—

Hennock (10 shares)	Lamherooe Wheal Maria (10 shares)
Tincroft (20 shares)	Lewis (10 shares)
South Tamar (20 shares)	Wellington (10 shares)
East Tamar (20 shares)	East Tolgus (5 shares)
Wheal Harris (50 shares)	Wheal Tremar (100 shares)
Nap Down Consols	Wheal Vincent (30 shares)
Warleggan Consols (20 shares)	Wheal Crebor (10 shares)
Snowdon (40 shares)	Heigaston Down (20 shares)
East Buller (10 shares)	Stray Park (10 shares)
Wheal Sophia (8 shares)	Wheal Trescoll (3 shares)
Tregear Consols (40 shares)	Bedford United (10 shares)
Grambler and St. Aubyn (5 shares)	West Wheal Virgin (6 shares)

MR. CROFTS issues a PRICE CURRENT of Mining Shares twice each week, which may be had on application.—Dated 4, King-street, Cheapside, Jan. 24, 1851. 10

MR. EVAN HOPKINS, C.E., F.G.S., &c., CONSULTING MINING ENGINEER,

OFFICE, No. 13, AUSTINFRIARS, LONDON.

Mr. HOPKINS may be consulted daily by Noblemen, Gentlemen, and Capitalists, who have invested, or may wish to invest, their capital in MINES or MINERAL PROPERTIES, on all matters connected therewith (Home and Foreign).

This office is the only one of the kind in the kingdom. No dealings in shares—is independent—having no connection with any party.

To avoid abuses, it is requested that no notice will be taken of any representations respecting mines—be they *favourable* or *unfavourable*—without being authenticated.

The object is to see justice done to the capitalists and property, and consultations on questions connected with general science.

*** Every description of Mineral Property inspected and reported on—on the Continent as well as the United Kingdom, and distant capitalists may receive periodical advice.

N.B.—Being a responsible and confidential business, and having a very extensive connection, it becomes necessary to acquaint those who apply for reports, that they must be paid for on delivery, at his office, otherwise they cannot be attended to. 11

MESSRS. FRANCIS & LIGHTOLLER, MINING AGENTS AND CIVIL ENGINEERS.

OFFICE,—No. 34, EXCHANGE ARCADE, MANCHESTER.

Messrs. FRANCIS AND LIGHTOLLER, may be CONSULTED by MINING COMPANIES or OTHER PARTIES requiring INSPECTIONS and REPORTS on MINES of every description, or by CAPITALISTS and OTHERS desirous of INVESTING their CAPITAL in MINES or other MINERAL PROPERTIES.

Statistics and other general information connected with Mines and the Mineral Districts given or obtained with the utmost dispatch.

Capt. Absalom Francis having had upwards of 30 years' experience in the practical management of mines, and reported on most of the principal ones in the United Kingdom, applicants may rest assured they will receive full and satisfactory information on matters connected with mining.

Arbitrators and contractors for the erection of every description of mining machinery. 12

MR. JAMES STRIDE, formerly of the firm of Bulmer & Stride, Parliamentary Agents, and late of Spring Gardens, MINING SHARE DEALER and AGENT, begs to state that he now TRANSACTS MINING BUSINESS at the *JAMAICA COFFEE-HOUSE, CORNHILL, LONDON.*

Considering the improving value of Mining Property, and the consequent increasing demand for Shares, Mr. Stride deems the present time favourable for offering his advice in respect to that description of property. 13

CONSULTING AND ADVISING MINE AGENCY,

OFFICES,—No. 11, ADAM-STREET, ADELPHI.

Science and Experience have done much for HOME MINING: a new era has commenced for that important branch of British Industry and Enterprize. It no longer ranks at the head of the *hazardous* undertakings of the day, but has become an enlarged and truly National Interest, and an inviting and profitable field for the INVESTMENT of CAPITAL. Guided by knowledge, discretion, and honourable management, there is no FIELD more PROFITABLE than HOME MINING.

The DESIGN of the Promoters and Managers of this CONSULTING AND ADVISING MINE AGENCY is—to organise a system for securing the BEST ADVICE of the science and experience of the day;—to provide INFORMATION on the true state of MINING OPERATIONS GENERALLY, or in any PARTICULAR QUARTER DESIRED;—and to ASCERTAIN, as far as practicable, the TRUE VALUE of MINING SETTS, on the application of individuals or of companies.

With Connections extending into all the Mining Districts of the United Kingdom and Ireland, and aided by the experienced judgment of eminent Geologists, from whom special reports may be obtained, when required, the means and resources at command are of a character to justify the fullest confidence.

Apply, personally or by letter, to GEORGE I. SOPER. 14

MEXICAN COMPANY—TWENTY-EIGHTH INSTALMENT.—The Directors having, under and by virtue of the powers vested in them by the Deed of Constitution, made a CALL of FIVE SHILLINGS per share on each and every of the shares of this Company, the proprietors are requested to PAY the same to the bankers of the Company, Messrs. Masterman, Peters, and Co., of Nicholas-lane, Lombard-street, to the credit of the Trustees of the Company, on or before Saturday, the 1st of March next.

J. M. MAUDE, Secretary.

32, Great Winchester-street, January 29, 1851. 15

THE BRITISH ELECTRIC TELEGRAPH COMPANY.

(Incorporated by Act of Parliament, passed 1850.)

Share capital authorised to be raised by the Act, 4000 shares, £25 of each.

Deposit £2 10s. per share.

CENTRAL OFFICES—ROYAL EXCHANGE, LONDON.

DIRECTORS.

JAMES SIMPSON., Esq. C.E., and V.P. Inst. Civ. Eng., *Chairman.*

J. C. COBBOLD, Esq., M.P.	E. HIGHTON, Esq., C.E.
W. GILBERTSON, Esq.	W. W. PEARSON, Esq., M.A.
A. HENDERSON, Esq.	G. G. SCOTT, Esq.
E. HIGHTON, Esq., Sen.	T. WEBSTER, Esq., M.A., F.R.S.

SECRETARY—Mr. GEORGE SAWARD.

BANKERS—Messrs. Barnett, Hoares, & Co., London; the Bank of Ireland, Dublin; the Belfast Banking Company, Belfast.

SOLICITORS.

England—Messrs. Bell, Steward, and Lloyd, 59, Lincoln's Inn-fields.

Ireland—A. J. Macrory, Esq., 48, Rutland-square, Dublin, and Duncairn, Belfast.

BROKERS—Messrs. Mullens, Marshall, and Daniell, London.

The Act of Parliament incorporating this Company was obtained last session, at the sole responsibility of the promoters, and the public have now the opportunity of subscribing for the remaining unallotted capital, and of joining to carry out this important and highly-promising undertaking.

The British Company is in possession of the most recent improvements in Electric Telegraphs, and is free from the burden of unproductive capital.

In America, where the monopolising effects of a single company do not exist, the Telegraphic System has become a thing of hourly necessity, and, whilst largely benefitting the public, remunerates the proprietors of the various companies at the rate of from 8 to 10 per cent. per annum. These dividends arise from the extensive use there made of the Telegraph, and not from the comparative cheapness of its construction there; inasmuch as the cost of the erection of a Telegraph under the Patents of the British Company may be effected for the same sum in this country as that paid for Telegraphs in America. The British Company proposes to assimilate its charges as nearly as possible to the American tariff, in the full conviction, that if the cheap and efficient system can work so profitably in a country at present undeveloped, and where the wires pass over vast tracts of almost uninhabited territory, there can be no possible uncertainty about its being doubly remunerative in Great Britain—the very centre and focus of mercantile energy and commercial greatness.

In speaking, however, of the profits of Electric Telegraphs, even as existing in this country, and under the operation of prices which restrict its use to cases of absolute urgency, the directors have no need to hazard any speculative calculations of their own.

It appears from the official documents of the South Eastern Railway Company, that the profit made by them on the transmission of commercial messages alone is at the rate of 5 per cent. per annum on the capital invested in ALL their Telegraphs, both railway and commercial—whilst all the messages transmitted for the WORKING OF THE RAILWAY are sent without charge. From the same documents, also, it appears that the railway messages are so numerous, that if paid for at half the rates charged to the public for the commercial messages, the return would produce a dividend of not less than 20 per cent.

Since the period of the construction of the South Eastern Company's Telegraphs, the cost of erection has decreased very considerably; and the directors of the British Company feel no hesitation in declaring that an Electric Telegraph company conducted upon the principles of cheapness, certainty, and dispatch, is capable of returning a dividend of upwards of 10 per cent. upon its capital, out of commercial messages alone.

The directors are making arrangements with various railway companies for laying down wires to the most important towns in England, Scotland, and Ireland, and are in full expectation of having several lines of Electric Telegraph in active operation in a very short period.

Applications for shares may be made to the solicitors; to the secretary; or to the Company's brokers, Messrs. Mullens, Marshall, and Daniell, Lombard-street, London.

Central Offices, London, January 30, 1851. 16

SALE OF LEAD ORE, BY TENDER.—A PARCEL of about 2027 cwts. LEAD ORE, lying at the IMPERIAL MINES, at MIES, in BOHEMIA, is TO BE SOLD by the Imperial authorities to the highest bidder.

Persons desirous of becoming buyers are requested to make a tender in writing, which must be delivered before noon on the 1st of March, 1851, at the Imperial Mining Office, Przibram, in Bohemia.

The conditions and terms upon which the above Lead Ore will be sold, may be learnt by applying to Messrs. August Faber and Co., 60, Mark-lane, London. 17

TO BE SOLD TO THE FIRST APPLICANT, FIVE SHARES in CARADON VALE MINE: they were offered to Captain Seymour for 12s. per share, but as he declined the offer, they are now offered to the public for 10s. per share, or less, so as to suit the pocket of the purchaser—which shares the public would have had an opportunity of purchasing before, had I earlier inspected the mine.

Apply to Richard Pascoe, 5, Trevecca, Liskeard.—Jan. 5, 1851. 18

TO BE LET, in Lots, for MINING PURPOSES, in NORTH WALES, for a term of 21 years, all that EXTENSIVE RANGE of METALLIFEROUS MOUNTAIN LANDS, part of the ABER HIRNANT ESTATE, within a few miles of the valuable Llangannog Lead Mines, the lode of which has been traced through the property, which is also intersected by various promising lodes, indicative of LEAD and COPPER—LIMESTONE abounds. The Crown claims have been redeemed.

Apply for particulars to Mr. W. Jones, Lion Hotel, Bala. 19

VALUABLE SLATE QUARRY TO BE DISPOSED OF, on the north coast of CORNWALL, on the Cliffs, and containing a large supply of very excellent SLATE, with shipping for the same close by. A term of 21 years is offered in the above-named Quarry, on such conditions as may be known by applying to Mr. W. D. King, solicitor, Camelford. 20

TO BOILERMAKERS.—The IRISH AMELIORATION SOCIETY hereby give Notice, that they will RECEIVE TENDERS for the WHOLE, or ANY PART of, ONE HUNDRED IRON FURNACES, to be constructed according to pattern and specifications, to be obtained from the office, No. 9, Waterloo-place, Pall-mall, London, at per furnace, to be delivered in Dublin.

Jan. 28, 1851. By order of the Court, G. L. PARROTT, Secretary. 21

PEAT CHARCOAL,—for AGRICULTURAL, SANITARY, and COMMERCIAL PURPOSES.—The TERMS upon which LICENSES are GRANTED to MANUFACTURE and VEND the SAME, under the Patents of Jasper W. Rogers, Esq., can be known on application to T. A. Yarrow, C.E., No. 88, St. James's-street, London. 22

CHARCOAL IRON.—By a recent INVENTION, this IRON can BE MADE in ENGLAND 25 per cent. below present prices. The proprietor offers a PART FOR SALE, to obtain capital to carry it out. Patents and proofs will be forwarded by him.—Address (post-paid) to Mr. Williams, Director of Mines, Philippeville, province of Namur, Belgium. 23

NOTICE.—All COMMUNICATIONS to Mr. GEORGE LITTLE, late of the firm of "Brett and Little," 3, Furnival's Inn, and Holborn, are to be ADDRESSED to "Mr. GEORGE LITTLE," No. 3, Commercial-place, Commercial-road, Peckham, Surrey. 24

CHEMICAL ANALYSIS, &c.—ANALYSIS and ASSAYS, or INVESTIGATIONS of ANY KIND, are UNDERTAKEN at the COLLEGE OF CHEMISTRY, LIVERPOOL.

Professor—Dr. SHERIDAN MUSPRATT, F.R.S.E.

Hon. Assistant—Mr. JOSEPH DANSON, F.C.S.

A list of Fees for Analysis, and for Students Working in the Laboratory, may be obtained by writing to Dr. Muspratt, College of Chemistry, Liverpool. 25

WANTED,—A PUPIL of the ROYAL COLLEGE OF CHEMISTRY is desirous of OBTAINING EMPLOYMENT, after the conclusion of the present session, in any WORKS where the SERVICES of a CHEMIST are REQUIRED.—Address "A. B.," office of the *Mining Journal*, 26, Fleet-street, London. 26

REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURRANT & CO., No. 58, LOMBARD-STREET, LONDON.

SHARES FOR DISPOSAL.

Devon Great Consols	Holmbush
Great Wheal Sheba	Dyngwm
Wheal Vention	West Caradon
Wheal Tom	Wheal Trescoll

N.B.—Statistical information furnished on British and Foreign Mines.—No CHARGE made unless business be transacted. 27

RAILWAY AND MINING OFFICES, No. 3, CASTLE-TERRACE, EXETER.—Mr. JOHN JURY, RAILWAY and MINING SHARE-BROKER, OFFERS his SERVICES to CAPITALISTS in the PURCHASE or SALE of ANY DESCRIPTION OF PROPERTY; and will be happy to point out a selection of such stock as appear the most eligible, from data that can only be arrived at by those who give an undivided attention to the subject.—Every information afforded (either in person or by letter) to capitalists wishing to invest or exchange their securities, and sales or purchases effected upon the best terms, and at one-half the commission usually charged. 28

MR. BELL WILLIAMS, MINE BROKER and VIEWER, 16, *CASTLE-STREET, LIVERPOOL.* 29

MR. JOHN DAVIES, MINING SHAREBROKER, *No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.* 30

MESSRS. BOXALL & CO., MINING SHARE DEALERS, 5, *CROSBY HALL CHAMBERS, BISHOPSGATE-STREET.* 31

MR. J. C. NESBIT, F.G.S., F.C.S., CONSULTING AND ANALYTICAL CHEMIST.

LABORATORIES—38, KENNINGTON-LANE, LONDON.

Mr. NESBIT gives PRIVATE INSTRUCTIONS in CHEMICAL ANALYSIS, and may be consulted on subjects connected with the Composition, Working, or Assaying of Minerals.—Analyses of Minerals, Slags, Soils, Manures, &c. &c., performed as usual, on moderate terms. 32

WHEAL HARRIET MINE, CAMBORNE, CORNWALL.—The Committee appointed at the General Meeting, held at Camborne, on the 8th instant, to conduct the affairs of the mine, give Notice that the OFFICES of the COMPANY are at No. 1, ST. MICHAEL'S-ALLEY, CORNHILL, where the Transfer of Shares, and all business connected with the mine, will be conducted.

The shareholders are requested to notify to the Committee the exact number of shares they hold, that the correctness of the Share Register may be immediately ascertained.

London, January 31, 1851. 33

CALLINGTON MINES COMPANY.—At a Quarterly General Meeting of shareholders, held this day, it was resolved,—1. That the reports and accounts now submitted be received, adopted, and entered in the Company's cost and transfer-book.—Carried unanimously.—2. That the thanks of this meeting be given to the directors and Mr. P. N. Johnson, for their services.—Carried unanimously.

Salvador-house, London, Jan. 29, 1851. 34

NAP DOWN CONSOLS SILVER-LEAD MINING COMPANY, COMBMARTIN, NORTH DEVON.

OFFICES—No. 62, THREADNEEDLE-STREET, LONDON.

In 3000 shares, of £3 each.—Deposit £1.

CONDUCTED ON THE COST-BOOK SYSTEM.

BANKERS—Messrs. Masterman and Co., Lombard-street, London; and the National Provincial Bank of England, Barnstaple.

SECRETARY—Mr. James Lane, No. 80, Threadneedle-street.

The following are some of the advantages under which this Company will commence operations:—

1. The lodes have been laid open to such an extent, that returns may soon be made.

2. The works are in progress of clearing, and a splendid new combined cylinder steam-pumping engine, built by Sims, of 100-horse power, with an entire set of pumps, are ready for work.

3. Labour is plentiful and coals cheap, and there are smelting-works in full operation close to the mine.

This Company may be fairly stated as one of the finest opportunities ever presented to the notice of the public for engaging in a highly profitable undertaking, at a very moderate expenditure. An extraordinary and important discovery has recently been made by shoding on the back of the main lode—nearly 2 tons of silver-lead have been raised in blocks of from 1 to 8 cwts. each. The lode, at this depth, carries a fine goosan, rich in silver; and in the captain's report of the 25th November last, he says—"On Saturday last several pieces of solid ore were discovered in ground that has never been explored—the largest piece weighing 364 lbs., and is an exceedingly splendid specimen."

In addition to the rich deposit of lead and silver with which the mine is stored, there is likewise a copper lode, of a promising description, from 3 to 3½ feet wide.

Applications for shares to be made to Mr. Thos. Allsop, stock and sharebroker, No. 1, Royal Exchange-buildings, London; Mr. James Lane, secretary, at the offices of the Company; and William Thorne, Esq., Barnstaple, Devon; or of the following brokers:—J. Davies, 38, Tower-buildings, Liverpool; E. Speakman, Exchange-chambers, Manchester; C. Beardshaw, Leeds; J. Ironside, Sheffield; Messrs. T. W. Flint and Co., Hull; G. Trickett, Post-office Chambers, Plymouth—to whom all communications may be addressed, and of whom prospectuses and plans may be obtained. 35

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY	Asiatic—5, New Burlington-street	2 P.M.
MONDAY	Entomological—17, Old Bond-street	8 P.M.
	Chemical—142, Strand	8 P.M.
TUESDAY	Linnæan—Soho-square	8 P.M.
	Civil Engineers—25, Great George-street	8 P.M.
	Pathological—33, George-street, Hanover-square	8 P.M.
WEDNESDAY	Society of Arts—Adelphi	8 P.M.
	Geological—Somerset-house	8½ P.M.
THURSDAY	Zoological—11, Hanover-square	3 P.M.
	Royal—Somerset-house	8½ P.M.
	Antiquaries—Somerset-house	8 P.M.
FRIDAY	Royal Institution—Albemarle-street	8½ P.M.
	Botanical—20, Bedford-street, Covent-garden	8 P.M.
	Philological—London Library, 12, St. James's-square	8 P.M.
SATURDAY	Medical—33, George-street, Hanover-square	8 P.M.
	Royal Botanic—Inner Circle, Regent's-park	3½ P.M.

GEOLOGICAL SOCIETY.

January 22.—Sir CHARLES LYELL (president), in the chair.

Thomas Webster Rammell, Esq., and Robert Rawlinson, Esq., were elected fellows.—The following communications were read:—

1. Memorandum respecting "*Choristopetalum impar* and *Cyathophora elegans*." By WILLIAM LONSDALE, Esq., F.G.S.

2. "On supposed Casts of Footsteps in the Wealden." By S. H. BECKLES, Esq.

3. "On the Superficial Accumulations of the Coasts of the English Channel, and the Changes they indicate." By R. A. C. AUSTIN, Esq., F.G.S.

The author, in describing the various evidences of elevation and depression to be observed, more particularly on the coasts of Devonshire and the Channel Islands, remarked that—1. There appeared an old sea-margin at about 8 or 10 ft. above the present sea-level, which had reference to the latest change of level of the coast. With this raised beach is connected the upper portion of the estuary deposits of the Exe and the Cornish valleys.—2. A series of marine shingle, &c., reaching a level of about 60 ft. above the present sea, contemporaneous with the "upper" or "mammaliferous crag" of Norwich.—3. Thick accumulations of angular fragments (known along the coast as "the Head"), not water-worn, but evidently formed under atmospheric conditions, and altogether derived from the rocks of the neighbourhood, contemporaneous with the terrestrial conditions indicated in the east of England by the fresh water deposits, mammalian remains, and buried forests of Happisburgh, Runton, and other places in Norfolk.—4. A thin bed of marine shingle, partially covering "the Head" (No. 3), connected with the marine beds, with remains of whales, in the Devonshire valleys, or equivalent to the "till," or "boulder clay."

From a careful comparison of the evidences of change of surface and of level here indicated, the author arrived at the following results:—That the Pleistocene period was of long continuance, and comprised very varied and long-continued conditions of the earth's surface;—that considerable portions of the south of England have continued dry land from times long anterior to the oldest of the "crag" deposits;—that the area of the English Channel was dry land at the time when the "red" and the "coralline crags" of the east of England were being deposited in a sea which occupied also a considerable portion of the north of Europe;—that "raised beaches," of contemporary origin with the "mammaliferous crag," are universally present on the coasts of the English, Irish, and Bristol Channels;—that the terrestrial surface existing in the south of England, St. George's Channel, the western entrance of the English Channel, and in the Channel Islands, subsequent to the deposition of the "mammaliferous crag," was continuous with that of Europe—was covered with pine forests, and bore the *rhinoceros, hippopotamus, bos, elephas*, &c., these and other associated forms having at this time their numerical *maximum*. It was of very long continuance, and suffered great oscillations of level. Elevation to the height of 2000 feet above the present level, raised some parts of the west of England within the line of perpetual snow, giving rise to the glaciers of Wales and Ireland, and to the frost—effected superficial debris of local rocks, seen in the thick accumulations of angular fragments forming "the Head" previously referred to. This marks the date also of the highest elevation of the Alps, Vosges, and Pyrenees, and, consequently, of the greatest force and width of both the European and the English rivers.—That subsequent depression of the land placed the surface again under marine conditions, which brought about the formation of a thin shingle bed in the west of England, and the glacial phenomena of the "boulder clay" in other parts of England and the north of Europe.—Lastly, further oscillations of level have given rise to the cutting back of the earlier coast-lines of the English Channel and other seas—to the formation of the latest "raised beach" (No. 1)—and to the existing level of the sea.

The following paper is to be read at the next meeting of the society—"On the Silurian Rocks of Scotland," by Sir R. I. Murchison, V.P.G.S.

INSTITUTION OF CIVIL ENGINEERS.

JANUARY 28.—WILLIAM CUBITT, Esq. (president), in the chair.

The discussion on Mr. Digby Wyatt's paper, "On the Construction of the Building for the Exhibition of the Works of Industry of all Nations, in 1851," was renewed, and continued throughout the meeting.

The meeting was then adjourned until Tuesday, Feb. 4, when the following paper will be read:—"An Inquiry into the nature of Patent Law Protection, with a view to the better appreciation and security of the Inventor's Rights," by Mr. Alfred V. Newton.

The Pocket Peerage of Great Britain and Ireland, with Genealogical and Historical Notices of the Families of the Nobility, the Archbishops, and Bishops: a List of Titles of Courtesy: a Baronetage of the United Kingdom, the Privy Council, &c. By HENRY RUMSEY FORSTER, of the *Morning Post*. London: David Bogue, Fleet-street.

This work on the peerage and baronetage of the United Kingdom is in a strikingly improved form to publications of a similar nature which have hitherto been presented to the world. Clearness of arrangement and facility of reference have been happily secured, and considerable additional interest to the general dry details of family history is given by amusing anecdotes. It is intended by the compiler to publish a volume annually; and, taking the one before us as a specimen, we are compelled to acknowledge that the information is copious and condensed, combining a portable form with a price which places it within the reach of many who would not think of purchasing former publications of a like nature. The work contains a list of the peerage and baronetage of the kingdom, the archbishops and bishops of England, Ireland, and the colonies, titles of courtesy, modes of address, gradations of rank, precedure, and every other information necessary to be known as connected with the world of rank and fashion. In the chapter on precedence, we are informed that its establishment is of very early eastern origin, and was admitted among the laws of Justinian. It does not appear to have assumed a recognised form in England prior to the invasion of the Normans; and the privileges appertaining to it have been mainly regulated by an Act passed in the reign of Henry VIII., 1539, and another in that of George I., 1714. In the descriptive part of the volume, every possible information connected with each family is given—the title, date of birth, family name, date of creation, residences, issue, motto, &c. The anecdotes of individuals connected with the several families are among the most amusing and interesting of its details; and the work is altogether got up in a manner reflecting much credit on its producer, and we have no doubt will be received with satisfaction by the public.

THE ELECTRIC TELEGRAPH.—We understand that Mr. George Little, late of the firm of Brett and Little, is now preparing to take out patents for some highly-important improvements in electric colloquial telegraphs. If we are rightly informed, Mr. Little's discoveries are somewhat of the wonderful, and we look forward rather anxiously for the completion of the grant, that we may insert a full description of them in our columns.

At a lecture recently given by Mr. Wright, the consulting engineer of the Western Gas-light Company, at their works, Kensall-green, he stated that the Scotch fishtail burner was the most suitable one for their gas, it being of so pure a quality; but as that burner was not generally approved of by consumers, another, the invention of a Mr. Guise, had been recently substituted with considerable success, and he then showed, by experiment, that it gave the light of 17 candles, at a consumption of 3 feet 6-tenths per hour. This is the glass conical burner we referred to a short time ago.

IMPROVEMENTS IN SHIPBUILDING.—A Dutch East Indiaman is now lying in one of the Liverpool docks, which has her lower masts constructed of iron plates formed into cylinders, and firmly rivetted together. Inside, at various intervals, are cross-bars, to maintain the shape of the cylinders, and to prevent bulging or other injury.

THE RIGHTS OF INVENTORS.—At the last meeting of the Society of Arts, the following resolution was passed by the committee of the society:—"That the importation of any patented invention practised abroad shall not confer a title to registration, except in the cases of the proprietors and inventors within 12 months from the date of the foreign patent; and that no invention, of which the patent has expired in any foreign country, or which has been published for a period of 12 months in any foreign country, or which is in free public use in any foreign country, shall be capable of being registered in the United Kingdom."

HOLLOWAY'S PILLS A SPECIFIC REMEDY FOR COMPLAINTS TO WHICH FEMALES ARE LIABLE.—After the experience of many years, it is incontestibly proved that there is no medicine equal to Holloway's pills for the cure of diseases incidental to females. The invigorating and purifying properties of these admirable pills render them safe and infallible; they may be taken by females of all ages, and disorganisation or irregularity of the system may be speedily rectified by their use, and the patient thereby restored to the most robust health. As a medicine for family use Holloway's pills are unequalled, and may be taken for bile, sick headaches, or nervousness.—Sold by all medicine vendors, and at Professor Holloway's establishment, 244, Strand, London.

A Compendium of British Mining.

BY J. Y. WATSON, ESQ., F.G.S.

No. V.—THE SYSTEM OF CORNISH MINING.—*(Continued.)*

The "ticketing," or weekly sales of ore, forms a curious feature in mining. The copper ore, on being raised from the mines and dressed, is put into heaps of several tons, and is well mixed; and a sampler, on an appointed day, fixes on a third or fourth of the dole. The parcel is divided into six doles—two of which are cut in half, and a slice taken off the sides by a shovel. After subdividing and mixing this, a sufficient quantity is put into a bag by each sampler; and this is taken as the sample of the whole. These are carried to the different assay offices, where the ore is pulverized, and an ounce (troy) assayed in a crucible, with proper fluxes; and a bead, or prill, of copper, is found amongst the scoria. If an ounce of ore yield one dwt. of copper the produce of that ore will be 1 in 20, or 5 per cent., and so on. The *standard* of copper is the term given by the smelter to denote the price of a ton of metal in the ore, from which standard he deducts 2*l.* 15s. for every ton of ore, or as many as may be required, according to its produce, to give a ton of copper, and which sum is considered by the smelter as an equivalent for the returning charge, or expense, of reducing the ores to a merchantable state. The returning charge is a fixed one—being the same for poor ores as for rich ones; but, inasmuch as it costs the smelter more to convert a ton of rich ore than a ton of poor, the standard varies with the produce, so as to equalise the matter—hence poor ores fetch a high standard, and rich ores obtain only a low one, because in the former case, the returning charge more than covers the cost, and in the latter is not supposed to equal it. Suppose a parcel of ore makes a produce of eight and one-eighth per cent. at a standard of 80—that is, the price which the purchaser can obtain for a ton of metal—the price of a ton of that ore may be thus obtained:—

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                80
               8⅛ produce.
              ------
⅛—640
   10
  ---
100) 650 (£6                £6 10
     600                     2 15 returning charge.
    ---                     ------
     50                     £3 15 value of the ore per ton.
     20
    ---
100) 1000 (10s.
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Every 20s. the standard rises or falls will make a difference in the assay of 1s., or a 20th in every pennyweight, and ½d. in every grain—as, for instance, 1 dwt. 1 gr. at 95*l.* standard, will make the produce 4*l.* 15s. the dwt., and 3s. 11½d. the grain; but, if the standard be 96*l.*, the produce will be 4*l.* 16s. the dwt., and 4s. the grain, deducting for returning charge. To give some idea of the profits of smelting, and the advantages taken by the smelters, who appear to enjoy an enormous and undisturbed monopoly, we are informed the expenses of returning a ton of ore into metal does not average 1*l.* 5s. per ton, although they charge the miner 2*l.* 15s. Again, the smelter gets 21 cwts. to every ton of ore—here is 5 per cent., or 5 tons of ore given him in every 100 tons he purchases. If we suppose a parcel of ore yields 10 per cent., 10 tons of it will yield one ton of pure metal; this, for the sake of argument, we will say is worth 80*l.* For the ore the smelter bids 8*l.*, deducting his 2*l.* 15s. returning charge—that is to say, he gets the 10 tons for 5*l.* 5s. per ton, or 52*l.* 10s. The *actual* cost of making this into metal, we will say is 1*l.* 5s. per ton, or 12*l.* 10s.—making the total cost of the ton of metal, 65*l.*, for which he gets 80*l.*, or 15*l.* profit, without including the 5 per cent. before alluded to.

A fortnight's interval takes place between the assay and the ticketing, during which time the agents receive answers from their principals, as to the price to be offered. Before dinner, tickets containing offers from the different copper companies, founded on these assays, are produced, and the highest is the purchaser.

The Cornish assayers, generally,* have not the slightest notion of the theories of chemistry, or metallurgy, and their assays are not very accurate. Ore which, according to their assay, gives a produce of seven, will often, upon a stricter analysis, yield more, and the difference goes to swell the already enormous profits of the smelter.

The process is, to take 400 grains of the sample of ore, pound it fine, sift it, and place it in a crucible, to roast in an air furnace, keeping the ore stirred with an iron rod. When the sulphur is considered to have been sufficiently driven off, the ore is taken from the fire, and allowed to cool gradually in the crucible; if then the upper part appears red, or brown, and the under part black, the proper roasting is supposed to have been given. A standard flux—composed of borax, 5 dwts.; lime 1½ ladleful (diameter of the ladle about ¾ in., and depth ½ in.); and powdered fluor-spar, 1 ladle—is then mixed with the roasted ore, and put into a crucible—the mixture being covered with salt. It is then melted, and what is termed a *regal*, or *regule*, produced; this regule is thought good if it will produce from 8 to 12 in 20. The grey sulphurets, the black oxide, and the carbonates, have sulphur added to them to "throw back the ores," as it is termed, as they are considered not to have enough of it for the purposes of the assay. To fine this regule, it is pounded and roasted in a crucible, until the sulphur is considered to be driven off. A flux—of nitre, 3 dwts.; red tartar, 10 dwts.; borax, 5 dwts.; and salt, 2 ladles—is then added, and salt sprinkled over the top of the mixture. Coarse copper is now obtained. If this comes out clean, the assay is put into a crucible without flux; and, when melted, the crucible is taken out of the furnace, and shaken until the surface appears blue. A refining flux is now prepared, by mixing two parts nitre and one part of white tartar in an iron motar, and stirring the mixture with a red-hot iron, until deflagration has ceased. The flux thus prepared is powdered and sifted when cold, and five dwts. of it are added to a ladleful of salt, put with the assay into a crucible. When all is melted, the copper is poured into one mould and the slag into another; the latter is again melted with two ladles of red tartar, and the small button, or prill of copper, now found, is added to that previously obtained, and the assay is completed. To assay tin in the dry way, reduce a portion of the ore to powder, place it in a crucible, or on the slab of a muffle, and expose it to a low red-heat; if arsenic or a sulphur be contained, it will thus be got rid of. The residue, when mixed with a little charcoal and linseed oil, in a well-closed crucible, is to be subjected to a bright red-heat, by which it will be reduced to the metallic state. In forming the regulus, care should be taken not to use too much nitre, as this will tend to diffuse the copper through the slag. If the regulus be soft or rough, it is not a good one, and another portion of ore may be tried; or, if the flux is red, more fresh fluate may be added and repeated. If the regulus be fine, add a small quantity of nitre; if rough, a larger.

The process of smelting copper ore is too complicated and lengthy for a small work like the present, and has but little interest, except to the practical miner; however, the following very condensed account may give the reader some little idea of it:—Copper ores contain sulphur, iron, and arsenic; the sulphur and arsenic being gradually dissipated in the furnaces. It undergoes in Swansea eight processes, six of which are alternate calcinations and fusions, the former to expel the volatile matter and oxidise the metals; the fusibility being thereby increased, the earthy matter and oxides, which are specifically lighter than the metal, float on the surface, and are skimmed off in slags; the seventh process is roasting; and the last refining—thus passing through the reverbatory, calcining, melting, and refining furnaces. The first process is to calcine the ore, the heat being as great as the ore will bear without being fused or baked. When sufficiently cool to be removed, water is thrown over it, to prevent the escape of the finer particles. The calcined ore is next melted, when the earthy matter and metallic oxides, being specifically lighter, float on the surface, and are skimmed off. The metal is made to flow into a pit of water, where it becomes granulated and called *coarse metal*. If the slags contain any copper, on being broken, it is found at the bottom. The granulated metal contains about one-third of copper, composed chiefly of copper, iron, and sulphur. The coarse metal is next calcined, and after calcination melted; with the calcined metal are melted some slags, from the last operation, which contain some oxide of copper, which becomes reduced by a portion of the sulphur, which combines with the oxygen and passes off as sulphurous acid gas, while the reduced metal combines with the sulphuret. The slags being composed chiefly of the black oxide of iron, fuse readily, and act as solvents for earthy matters, &c. The metal, after the slag is skimmed off, is either tapped into water or into sand-beds. In the granulated state it is called *fine metal*; in the solid form, *blue metal*, from the colour of its surface. The fine metal is next calcined, and then melted, similar to that of the coarse metal, and the product is a coarse copper, containing from 80 to 90 per cent. of pure metal.

The next process is roasting, or oxidising. The pigs of coarse copper from the last process are exposed to the action of the air, which draws through the furnace at a great heat. The volatile substances are expelled, and the iron, or other metals which remain, are oxidised. The pigs are covered with black blisters, and the copper is called *blistered copper*. It is porous and honey-combed, from the gas formed during the ebullition, which takes place in the sand-beds, or tapping. An assay is next taken out with a small ladle, and broken in a vice; the copper in this state is termed *dry*. In the process of toughening, the surface of the metal in the furnace is first well covered with charcoal; a pole, commonly of birch, is then held in the liquid metal, which causes considerable ebullition, owing to the evolution of gaseous matter; and this operation of *poling* is continued, occasionally adding fresh charcoal, that the surface may be covered until the refiner perceives, by repeated assays, the grain perfectly closed, so as to assume a silky polished appearance when half cut through and broken, and do not crack at the edges, he is satisfied of its maleability. Copper for brass is granulated with warm water; the copper assumes a round form, and is called *bean shot*. With cold water it has a light ragged appearance, and is called *feathered shot*. The former is the state in which it is prepared for brass-wire making. It is cast for exports to the East Indies in pieces six inches long, and weighing eight ounces, called *Japan copper*. These are dropped from the moulds, immediately on becoming solid, into cold water, and by a slight oxidation, the copper acquires a rich red colour on the surface.

Tin ore, previous to its reduction, is pulverized in a stamping-mill to various degrees of fineness, depending on the size of its crystallisation, and the ingredients with which it is found mixed. If it contain no volatile matter, it is seldom dessicated—on the contrary, if it does, this process is never dispensed with. The ore is reduced in a reverberatory furnace, mixed with a portion of culm. At the east end of the furnace is a *ridge*, or railed line across the floor, between which and the eastern wall is the fire; the chimney is at the west end, and its mouth about two feet above the level of the ore—so that the heat passes over the whole most intensely; as it melts, the combustible and earthy matter, being specifically lighter, floats on the surface. By introducing an iron rake, the brilliant metal momentarily meets the eye below the buoyant covering. In about six hours the metal is let out, and the floor remains covered with scoria. This matter is drawn out at the west end, and when cooled is black from the prevailing oxide of iron.

The mode of purifying tin from its alloys differs little from that observed in refining copper. The tin smelted at the different houses is cast into moulds, containing about 3 cwts., and, while in a fluid state, it receives the stamp of the particular house where it is smelted, and is denominated *block tin*. The blocks are weighed, numbered, and sent to the nearest coinage town to be coined. In the coinage hall, a piece of about 3 or 4 ozs. is cut off from one of the lowest corners, in order to prove the fineness of the metal. The face of the block is then stamped with the Duchy seal, which constitutes the coinage, and is a permit for the owner to sell; and, at the same time, the corner being cut off is an assurance that the tin has been properly examined, and merchantable.

[*To be continued in next week's Mining Journal.*]

* There are some skilful assayers; and this remark, I would beg to say, was taken from the writings of a Cornishman.

Original Correspondence.

THE ORIGIN OF ORES IN LODES.

SIR,—I presume the question between Mr. Rowlandson and Mr. Ennor is on the formation of sulphuret of lead and other ores, from or within moist rocks. Mr. Ennor very properly remarks that, had the rocks been exposed to melting heat, a great part of the ore would necessarily have been reduced into a metallic state, subject only to subsequent oxidation.

In reply to this, we find the following observations by Mr. Rowlandson:—"That he has seen such effects, and, "moreover, the separation of lead from ores much contaminated with zinc, bi-sulphuret of iron, and bi-sulphuret of copper, is founded on the fact just alluded to, and is practised on a large scale at the Saxon Mines, and could be advantageously adopted with the produce of many lodes in Cornwall, now unwrought."

I have resided for some time in Saxony, and am well acquainted with their mines and metallurgical operations, but I cannot see what that has to do with the formation of sulphurets in rocks by igneous action; and, further, the mere superintending of a smelting establishment, however "old" and "large," does not necessarily enlighten a person in the subterranean laboratory of Nature; such experience has nothing to do with the question of the growth, production, and various changes of ores in rocks.

When Mr. Rowlandson has been able to produce sulphurets of lead, of a similar crystallization as those found in Nature, with their usual crystalline associates, he will then, and not till then, be justified in his conclusions. Mr. Rowlandson further states, in his letter to Mr. Ennor, that "there is not a mining geologist of *any repute*, either British or foreign, that does not entertain the same opinion"—viz., the igneous formation of mineral veins. I shall feel obliged by your correspondent naming a single one, entitled to the denomination of a *mining* geologist of *repute*, who upholds such a theory. I mean a person of practical mining knowledge, whose opinion is appreciated by the proprietors of mines for the correctness of his judgment in such matters, and not mere theoretical geologists, confined to lectures or popular amusements. Such vague notions of the formation of crystalline matter, containing such a large proportion of water chemically combined, and strongly saturated with the same elements in solution in which crystals are often detected in the act of forming in old mines and other subterranean cavities, appear to be so totally out of character that it scarcely deserves comment. Mr. Rowlandson, if serious in his views, had better direct the proprietor of the mine in question to the hearth, and the quickest way to get to the tapping hole.

Austinfriars, Jan. 29. ALBERT DUMARESQ.

ON THE ORIGIN OF ORES IN LODES.

SIR,—I am glad to see Mr. Rowlandson enter the field; but am sorry to find him beset rather closely, and charged with giving a fictitious report of a mine. I avoided this point as much as possible, and was not aware it was the intention of others to do so. I have no doubt but these charges over-balanced his temper, so as to divest him of his better judgment. Seeing he was of the "igneous school," and judging, as he now remarks, that he was in good *company*, I was rather anxious to have this law expounded, that I might judge for myself if it was palateable, before I became a convert to join this goodly company of school-taught theory mine inspectors; and knowing most men feel an interest in making converts to their own ideas, I expected to have found Mr. Rowlandson quite ready and willing to answer every question I put to him, in such a clear straightforward manner, as to convince me, and others of my class, that his reasoning was grounded on undeniable facts. What are his answers? I will take them with my remarks on my former questions. I first asked him if the lode round the eruptive mass formed a *semi* or *half circle*, which we have every reason to suppose would have been the case if the lode was formed before this upheaval took place, as it must have *contorted* and thrown it quite out of its direction. Then, let us suppose it only a crack that opened at the time of this upheaval; how does he account for its continuation from there to the *south coast of Cornwall in one continuous line*—the upheaval only taking place at Pentire Glaze?—No answer. I then ask where and in what state he supposed this lead was before this fused mass and upheaval took place, and ejected 2000 tons of lead up even to the surface in this crack, which he admits is at some distance from the fused mass? Was it a sulphuret *ore of lead*, or *pig-lead*, or in what other state? Being once favoured with the sight of a lead smelting-furnace, I there in one department saw it coming out pig-lead, and in another they were converting it into litharge, which caused me to ask if he (Mr. Rowlandson) ever saw the ores of lead melted on a large scale, and it did not become pig-lead. To this he answered, "I have." And then he goes on to tell us that lead is separated from the ores it is blended with in the large mines in Saxony, and in a large way. Does he mean to tell us that it is first brought to a state of fusion, and then returns to galena, or the sulphuret ores of lead, as now found at Pentire Glaze?—if so, he has certainly answered that question, and it is the information we wanted to convince us as to the effect of these igneous upheaves. Can he show us that his process can be done advantageous to our chemical and mechanical operations, and its Nature-acting process? Were the Saxons possessed of such free smelting ore as that found at Pentire Glaze, would they attempt to separate it without reducing it to pig-lead as quick as possible? If so, could they do it to advantage? In that case, they are very far in advance of our lead smelters; and I think Mr. Rowlandson, if he values his country's interest, is in duty bound to bring it before the public. He next says he has *superintended* a large smelting work, and has there seen the lead separated from the other corrupt ores it is contaminated with in a large way. I do not understand what Mr. Rowlandson means when he says a large smelting work, if the ore is not

smelted. He then states that lead could be separated from all its foul contaminated ores in Cornwall to advantage.

Now, this is certainly coming out, and if he will only prove it, it would be advantageous to adopt his plan. I hope Mr. Rowlandson has not formed so low an opinion of Cornish smelters as to think they have now to learn how to separate *lead* from its foul adulterated ores. I happen to know a little of smelting, and am aware that there are *boys* in many common schools, situated near the smelting-houses, that know how to separate these ores, and even how to separate *silver* from either of his named ores. If Mr. Rowlandson enters the Cornish smelters' field, he must come in with some improvement, otherwise he had better remain in town.

I very much regret that Mr. Rowlandson did not give your readers a little more information as to the state this 2000 tons of lead was in when ejected into Pentire Glaze *lode* or *crack*. Knowing what it contains, can he for a moment suppose that it was thrown up from a fused mass in the state it is now found? Mr. Rowlandson says that the lode was formed subsequent to this fused upheave. Could that possibly take place without contorting the lode? It must even have divested it of its former contents, to make room to deposit the 2000 tons of ore.

I know not what Mr. Rowlandson's practice is in mine inspections; had he travelled so many thousands of miles in the bowels of the earth as I have, he would long since have discovered that there is nothing there to be perceived that will bear out his *igneous theory*, of ores being projected into lodes by upheaves which took place from great heats in the earth. *Show me one contortion* or fault in a lode that cannot easily be accounted for—nine-tenths of which are found to take place by lodes and strata intersecting each other; and it is daily going on, without even putting a vein out of its place, further than what is termed a *fault* or *move*; and these intersections may be fairly termed the stop-valves of the earth, which are the real causes of the accumulation of ores at certain points.

I next follow Mr. Rowlandson in his remarks on the prospects of the mine, when he says he had arrived at the conclusion that the shallow working had been materially effected by the before-mentioned exception, whilst the lower part of the lode descended at a regular unfractured angle, which led him to conclude that large deposits of ore would be found in depth. I had no wish to interfere as to the prospects of the mine, but it is really surprising to think that he could come to this conclusion, when he knows the lode in the upper series, where he says its has produced such immense quantities of ore, and in the lower series where he says it is so regular and well-defined, produces little or none; and I venture to tell him that my opinion is at variance with his, and he must go north or south to find a second deposit. The Williams's were wide-awake men, and they that follow them seldom find many eggs left in the nest. He again says—"I lugged in the carbonate of lead, as if he was not aware that the carbonate of lead heated to a temperature to fuse galena would be converted into an oxide of lead." Where did he ever see or hear of mines so hot as to fuse galena—carbonate of lead is almost an every day's formation in mines. Persons wishing to be informed as to indications, prospects, and value of mines may (as Mr. Mushet very properly remarked) as well refer to the mountains of the moon, as to a pupil of the igneous school. Should Mr. Rowlandson at any time see his error, and is willing to *abandon* what I term "Pusayite principles," I shall be glad to give him the right hand of friendship, and endeavour to assist him in exploring, I may say, the *boundless mining field*.

In conclusion, I venture to make a few remarks on Capt. Bishop, seeing an allusion as to what would be done under other manage ment. I beg to say that I was not aware when I wrote my letter of his being the agent of the mine; but he was an old workman of mine, and I know him to be a man quite capable of carrying out a mine on a much larger scale than Pentire Glaze; and whoever succeeds him, without some discovery is made, will not make much improvement. He has had long experience in lead mines. N. ENNOR.

Wiveliscombe, Jan. 29.

COMPENDIUM OF BRITISH MINING.

SIR,—I quite agree with most of the able remarks of "Argus," on Mr. Watson's Compendium of British Mining, and have before hinted that I thought he had engaged in a task he was not sufficiently conversant with to do it justice. Had it passed the scrutiny of "Argus," or some other practical man beforepublishing, he would have found it less subject to such remarks; he has certainly taken some trouble to get it up, and it is very interesting to many of your readers, and they are bound to give him all the credit to which he is entitled. However, "Argus" must labour under some mistake when he attempts to confute Mr. Watson, where he says the richest copper veins are most times found in the clay-slate, at no great distance from the granite, and quoted in opposition Wheal Music, Wheal Leisure, and Great St. George. Is "Argus" aware that part of Great St. George sett is in granite that is rich in tin? Clegahead is a beautiful granite, not above a quarter of a mile from the present workings; the whole of St. George, and even Wheal Leisure, from every appearance, is in the upper series of clay-slate that overlies the granite, and Wheal Leisure, I think, is not above a mile distant. Then let us look at Wheal Charlotte, and suppose the granite at Clegahead to continue in a westerly direction, as most of the granite runs do in Cornwall, it would pass under the sea, and not be very far from Wheal Charlotte, and no man can prove that granite is not there; then if we look at the granite about Redruth, and take the distance as the crow flies, it would not be very great. Under these circumstances I am sure "Argus" will most agreeably allow Mr. Watson some latitude, nor take advantage of slight errors.—N. ENNOR: *Wiveliscombe, Jan.* 29.

PERRAN ST. GEORGE UNITED MINES.

SIR,—A discussion on the present and perspective value of the recently discovered lode in these mines, gave rise to a sharp debate between two parties of miners, the major part of whom being acquainted with these mines in bygone days; and as neither party could produce satisfactory facts to establish their assertions, it was ultimately agreed to request the insertion of the following in the *Mining Journal*,—trusting that some friend will afford the requisite information, so as to show which party is correct.

One party contends that, within the last 50 years, more than 500,000*l.* worth of copper ores has been sold from these mines, besides a very considerable amount of tin; and that no other piece of ground in Cornwall has yielded a greater amount within similar limits—namely, 600 fms. long, 200 fms. wide, and 60 fms. deep, below adit, as but a comparative short distance is sunk below that level, and neither of the lodes deeper than 80 fms. The opposing party in this controversy questions the accuracy of the amount specified, in the absence of any satisfactory detail, showing how it accumulated; and that there might be other localities in the county, within the same period and extent, that have yielded as much, or a greater amount, but not knowing which to select, so as to point to the spot.

It may not be out of place to mention that the sett within the period specified has been worked by the following parties:—Captain John Trelease and Cornish gentlemen, Captain Thomas Trelease, and Messrs. Williams and Co., who sold the mine to the English Mining Association, whose lease expired in 1839; also a part of the said limits by the Wheal Perran Company, and likewise the present proprietors, who commenced in 1844. MODERATOR.

St. Agnes, Jan. 27.

WEST DOWNS MINING COMPANY.

SIR,—Finding in your Journal of last Saturday a notice stating that at a meeting of the adventurers of this mine my name had been returned as a defaulter for 64 shares, I beg to say that I resigned these shares to Mr. James Diamond, who was then purser of the mine, about 18 months ago, who accepted the same without purchase, stating that there was tin and materials enough on the mine to more than cover all liabilities; and that I have in writing informed Mr. Robins, solicitor of Tavistock, who I believe now acts as purser, that this was the case.—P. N. JOHNSON: *Hatton Garden, Jan.* 29.

GREAT SHEBA CONSOLS.

SIR,—I observed, in your last Journal, a report on this mine without a signature, and such report was calculated to convey an unfavourable impression. I beg to state the same was not official, neither was it authorised by any shareholder. The object, therefore, is palpable—viz.: to frighten the timid, and bring shares on the market. I would advise all parties never to pay any attention to unauthorised and anonymous reports, but to await the official report. The mine looks exceedingly well; no such discovery in the east of Cornwall has taken place since the Great Devon Consols. The party furnishing such gratuitous report would, no doubt, gladly see a similar course of ore as in Sheba in the mine which he has had the honour, for the last 10 years, to carry on, but fortune has not yet smiled on his exertions.—Z.: *Exeter, Jan.* 27.

NORTH WHEAL VOR MINE.

SIR,—This mine has several times been brought under your notice, and that of the public, as one of a promising character, if the mining geologists will admit that such words as "promising" and "kindly" should be applied to mines holding out prospects of successful issues. With some of these gentry such words, I find, are obselete—so, of course, the word adventure should no longer be used, if they can tell before the explorations are made what the result will be. A licence to work North Wheal Vor was granted about ten months ago to Mr. G. J. Phillipps, of Camborne, and he was appointed the purser, and partially formed a company, when operations on a small scale were commenced. Several meetings of the adventurers were held in Camborne, and were remarked for their stormy character. It appears that because Mr. Phillipps sold some shares at a small premium, some of the other adventurers, of very low rude manners, took offence at him; and, having secured a majority on their side, they resolved to get him out of his situation and adventure by winding-up the concern, and taking a licence in another name. This was effected—the licence being re-taken in the name of Capt. Blewett. But "he that diggeth a pit shall fall therein himself;" so a slight disappointment came upon this party—a just, but very light, retribution for their unfair dealing. For upon a representation of the facts to Mr. Grylls, the agent for the Duke of Leeds, he directed that, on the expiration of the last six months' licence, the sett should be granted to Mr. Phillipps, who had assigned all his interest to J. N. R. Millett, Esq., of Penzance, to whom the other lord (C. W. Popham, Esq.) has also promised a grant. I now learn that the party in possession, but whose licence expires in a month or so, are alarmed at the insecurity of their position, and are about to hold a meeting to take the matter into consideration. As they have not worked under the licence, they may as well save all the expense of any further measures, and quietly retire for Mr. Millett to enter into possession, which he is sure to do in due course.

Jan. 29. FAIR PLAY.

SILVER VALLEY AND WHEAL BROTHERS MINING COMPANY, AND THE COST-BOOK.

SIR,—The *Mining Journal* is, I believe, disposed to exercise a viligant superintendence over the merits or demerits of new undertakings; and no Journal could win for itself "golden opiniona" from all sorts of people more easily than by the exercise of this vigilance; but as men's minds are as differently constituted as their qualifications are various, it can scarcely be expected that you, Mr. Editor, should not occasionally require your attention drawn to a particular matter; and this is the office I undertake at the present moment.

I observe, in your last week's Journal, an advertisement of the Silver Valley Mining Company—of the merits of which I know little, except that the ground constituting the "sett" has been pretty considerably ransacked in by-gone times; but it may still be a fair speculation. What I have to remark upon in the matter is, that the concern is to be brought out with *ten thousand pounds paid-up capital*, and yet on the Cost-book Principle! Now, if you, Mr. Editor, understand anything of the "principle" of the cost-book, I think you would inform me that it is to enter therein the monthly costs *as they are incurred*, and to call for the money as wanted, according to the greater or lesser expenditure, justified by the works performed, for materials, machinery, labour, &c. Let us suppose, however, that the unobservant or careless portion of the investing public subscribe this 10,000*l.*, and it is paid to a banker; and supposing the Silver Valley cost to be 250*l.* per month (a liberal sum for a mine with 40 to 60 hands upon it), it would take the best part of *three years to spend the capital*; and surely the money might just as well remain in the adventurers' pockets, and be gradually drawn thereout, as to be paid in a lump. If, however, the shares of this mine are intended to play at shuttlecock with on the Stock Exchange for the sake of premiums, that is another matter; but, in the name of legitimate mining, I take the liberty of objecting to the "cost-book" being supposed to have anything to do with a concern constituted as this is. As to whether 10,000*l.* is a large or a small sum to *pay down* for a mere mining speculation, I must leave to intended investors to consider. It appears to me to be a bold proposition; but, Mr. Editor, I hope I may not be misunderstood by you or your readers. My object is not to condemn the Silver Valley speculation, but to awaken attention to its real merits. MENTOR.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—We have not yet commenced the sinking of Field's engine-shaft under the 80 fm. level, but hope to do so on Tuesday or Wednesday next. The fixing the pitwork has taken longer time than was expected to complete it. The lode in the 70 fm. level, east of the engine-shaft, is in size and value just as reported last—viz., worth 60*l.* per fm.; the lode in the rise over this level is 6 ft. wide, and is worth from 80*l.* to 90*l.* per fm.; the lode in the stopes over the back of said level is from 9 to 12 ft. wide, worth from 140*l.* to 160*l.* per fm. The lode in the winze sinking under the 60 fm. level, west of Wyld's shaft, is worth quite 150*l.* per fm. Wyld's shaft is communicated to the 60 fm. level by boring, and by the end of the present week will be completed to this level. In driving south in the 10 fm. level, east of Wyld's shaft, we have cut the Oak Tree lode, and have now commenced driving on it; the lode here is 2 feet wide, and has a promising appearance, composed of gossan, mundic, and spar. The adventurers in these mines must know that, by reason of the explosion of the boiler at our steam-whim, it has caused great delay in every part of the underground operations, in drawing and crushing—I should say at least 50 tons of copper ore for the present sampling. Our sampling on Tuesday will be about 200 tons. The boiler will, we think, be completed by the middle of the present week by the makers; after which the masons will be at work, and we hope in a fortnight to have it completed, and be put in the former position. The expense of this misfortune will not be less than 100*l.*, besides time lost.

BEDFORD UNITED.—In the 115 fm. level, east of the engine-shaft, the lode is much the same as last reported; in this level, east of Andrews's winze, the lode is 3 ft. wide, composed of fluor-spar and mundic, with stones of ore in places; ditto west, we are driving by the side of the lode. The lode in the 103 fm. level is 4 ft. wide, and worth 10 tons of ore per fm. There has been no lode taken down in the 90 and 80 fm. levels east. In Arscott's winze, in the 90 fm. level, the lode is 3 ft. wide, producing 10 tons of ore per fm. The pitches continue to yield good returns.

BODMIN WHEAL MARY CONSOLS.—The engine-shaft is sunk 3 fms. 3 ft. below the 10 fm. level. In the 10 fm. level the cross-cut north is extended 6 fms. No. 1 lode not yet cut, ground very favourable. In No. 3 lode in this level we are breaking some fine stones of ore. No. 4 lode in this level contains a large quantity of jack and peach; it is poor for ore, but not unkindly. In the adit level, the No. 4 lode in the winze is as last reported. The No. 4 lode in the eastern winze is looking well; we shall draw 30-whim kibbles of ore from this point to day (Jan 31). The No. 1 lode in the winze is 5 feet wide, looking very kindly, with good ore in stones and branches disseminated throughout; the whole of this lode is saving work.

BORRINGDON PARK.—Since my last report we have driven about 5 fms. on the course of the lode, and our end is very much improved going towards the Coombe; at the lowest calculation, it will at the present time turn out 1 ton of lead per fathom; I broke ¼ ton this morning in less than an hour, and our men offered to take it at 5*s.* in 1*l.* Owing to our having had so much rain, the masons have not got on so fast with the smith's shop as was anticipated.

BRYN-ARIAN.—The lode in the 10 fm. level, driving west, is from 5 to 6 ft. wide, with several small branches of ore, rather improved within the last few days. The stopes in the back of this level are still yielding about 10 cwts. of ore per fm. The stope in the back of the deep adit level west is not so good as last reported, being disordered by a slide. We are quite ready and waiting at Pensarn for the pumps, which we can get no account of having left Plymouth.

BRYNTAIL.—We are without much alteration since my last. The eastern stope, in the 10 fm. level, will produce 3 tons of ore per fm. The western stope, in the 5 fm. level, will produce 3½ tons of ore per fm. The rise, west of Hill's stope, will yield 1 ton per fm.; ditto, east of Hill's stope, is not rich enough to put a value upon. In No. 5 cross-cut we have not yet any ore. The western stope in the 10 fm. level, and the eastern stope in the 5 fathom level, we are unable to work, the mine and floorings being quite full of stuff. Hill's stope we shall set next pay; it is without alteration, producing 3 to 4 tons per fathom. We have dressed 35 tons this month, and shall be able to increase upon that quantity when we have more crushing power; the new crusher I have intelligence of having arrived at Aberystwith, and shall lose no time in having it erected.

CARADON VALE.—In common with our neighbours, I am sorry to say that the late excessive rains have so much increased the water as to impede our sinking operations. We have got through the floor of hard ground noticed in my last, and the men are now proceeding at their usual rate of sinking, about 7 feet weekly; they will have completed their bargains by the middle of next week, when the shaft will be 14½ fathoms below the 14 fm. level.

COPPER BOTTOM.—Since our last setting day we have driven a cross-cut in the 50 fm. level, and cut the lode; the lode going east is 1 ft. wide, producing some good stones of copper ore. In the 50 fm. level, west of engine-shaft, the lode is 15 in. wide, producing yellow and grey ore; from the appearances of the lode in the bottom of these levels, we are on the top of a run of ore ground. In the 40 fm. level, east of the engine-shaft, the lode is 1 ft. wide, producing large stones of mundic; the ground and character of the lode is much altered for the better in this end; in the 40 fm. level, west of engine-shaft, the lode is at present poor. We have 44 fms. more to drive in this level to cut the slide; when this is done we have every reason to expect a bunch of copper ore, as there is a good lode gone down west of the slide in the bottom of the 30 fm. level. In the 20 fm. level, west of Paull's shaft, we have had a good branch of ore during the week; at present it is not so good, but very promising. The north lode, in the 30 fm. level, west of flat-rod shaft, is at present unproductive; we have about 16 fms. more to drive in this level to get under the ore ground gone down in the bottom of the 20. In consequence of the very heavy rains, and great increase of water, we have been prevented working two or three days in this level during the week, otherwise we should be working it with spirit. In the 20 fm. level, west of May's shaft, the lode is at present poor, but not unpromising for ore. In the 10 fm. level, west of Gendall's shaft, the lode is 10 in. wide, producing stones of mundic, and very promising. We have discovered a new lode, north of flat-rod shaft, which looks very promising, and have sunk about 3½ fms. on it, and discovered some fine stones of ore; the lode is of a very promising character, and likely to enhance the value of the mine; we have been obliged to suspend sinking on it, on account of the increase of water. Our tribute department is improved; we have raised during the last four weeks about 100*l.* worth of ore, and the mine is in a progressing state. We expect to cut Blewett's lode in the 10 fm. level, west of ladder-road winze, in about 10 fms. driving. The branch which we cut south is looking very well; we are also raising some very good ore from the branches further west. We shall commence sinking our engine-shaft below the 50 fm. level by the end of next week, to get at the ore ground gone down in the bottom of the 50 fm. level.

CWM ERFIN.—The beginning of the bunch of ore in the 30 fm. level is just coming into the shaft sinking below that level. The end of the 30 east is poor at present, owing to some cross-courses which have disordered the lode; the stope over this level is still in a good orey lode. We expect to sample 24 tons of ore on the 4th inst.

CWMYSTWITH.—The lode in the 30 west is looking much better than when the agent wrote last, its appearance being more favourable for making ore than it has ever been; the prospects in the 30 are very good, three lodes being laid open, about 20 fms. on each—all pretty good; the stopes in the 30 being nearly worked away, the returns may be somewhat lessened, until the 40 fm. level is driven under the ore ground.

DEVON AND COURTENAY.—In the 60 end west there is a favourable change in the ground, being more easy for driving, and I hope soon to be under the ore ground in the 40 fm. level. There is also the same change in the 60 east. A part only of the lode in the 40 has been taken down, in consequence of a splice, which assumed the appearance as if the lode had been cut out. I have this morning (Jan. 28) broken into the other part of the lode in several places, and I am glad to say have broken ore not inferior in quality to that already reported. As to the width of the lode, I am not at present able to say, but in a few days I may be able to do so.

EAST BALLESWIDDEN.—We are getting on well with our work about the wheel, have several hands employed, and expect to get the iron axle on the mine next week. I have been noticing the lodes; we have, without doubt, a good mine before us here; reports say there is a rich lode of tin in our engine-shaft, this I shall try to set before your next meeting. We are now working like men, and hope you will be able to say as much at your meeting.

— *Jan.* 27.—We have this day laid some of the ground timbers for the wheel, which will now be put together as fast as possible. There are two sawyers cutting timber, two carpenters working the same, and the foreman putting it together as fast as possible. Two smiths are going on with the iron-work with all speed; and three men are making leats to bring home the water to the wheel, which will be set to work at the earliest possible period.

EAST DAREN.—The water has become too abundant to be kept under by the small water-wheel in the mine—other means will shortly be adopted for draining it. The end of the 20 fm. level, when suspended, was very rich, producing 3 tons per fathom of silver-lead ore. The 10 fm. level in the bottom is 4 ft. wide, orey throughout. It is, however, feared that the water will soon be up to this level also.

EAST SHARP TOR.—The ground in Hitchins's shaft is without any alteration as to character, but not quite so favourable for sinking. The water is still very quick and troublesome, which impedes the progress considerably; the engine works at present 12 strokes per minute to keep it.

EAST WHEAL GEORGE.—Last Friday (Jan. 24) was our setting—we let as follows:—The 12 fm. level to drive east, by six men, at 3*l.* 10*s.* per fm.—to drive to the north of the lode. The lode being hard, we propose to cut through it every 10 fms.; where we cut through the lode last is 9 ft. wide—a very strong lode, producing good stones of ore. The stopes in the back of the 12 fm. level west are let to four men, at 30*s.* per fm.—lode much as usual, worth 20*l.* per fathom. The sumpmen have commenced driving the cross-cut in the 23 fm. level—this level will be urged onward with all possible speed—I expect we shall intersect the lode in about a month. In consequence of the late heavy rains, we have not been able to take off the ore at the usual time, it being not in a fit state for carriage, but I hope we shall sample in the course of a few days.

EAST WHEAL JOSIAH.—The lode in the adit end south is much of the same size and character as last reported on, about 3½ ft. wide, composed principally of fleokan, spar, mundic, &c., the ground in which is very soft for driving, consequently requiring pretty much timber to keep it open.

EAST WHEAL REETH.—I have not broken any of the tin which we found ten days ago, as the men are working under; but as soon as the shaft is cleared, I shall do so, and sell it with the other tin we have now on the mine. Before this month is out we shall be getting into the tin ground. I hope you will determine to have the engine erected shortly, as we cannot expect to have water for the wheel longer than till May; but before that time, if Capt. Hollow tells me right, I hope to cut the Wheel Reeth lode, as well the Carbona, which he says is only 10 or 12 fms. from the one driven at the bottom of the shaft. An old man from Zennor has sent word to me this morning that he could give me some valuable information respecting this mine; he says there is a good course of tin near Wheal Nantz Well; he worked here when a boy, and rose a great quantity of tin.

ESGAIR LEE.—In my last, I informed you that the caunter lode in the 12 fm. level, east of Morgan's winze, had much improved; and I am glad to say it has continued to do so during the past week. The orey part of the lode is 2 ft. wide, with a good and regular foot-wall, and yielding, at present, 1½ ton of ore per fm. The lode in the deep adit, east of Morgan's winze, is now unsettled, and the stratum about it is in a disordered state. The stopes are, on an average, much the same as last reported, yielding about ½ ton of ore per fm. We sampled on Thursday last, 20 tons of ore, and since our dresser left us, we are getting on very well with the dressing, and have made a good start for the next sampling.

FERNHILL WOOD.—Since our last meeting, we have sunk a new shaft 10 fms. 2 ft. from surface, cut a new leat to the wheel nearly one mile long, made the wheel-pit for the reception of a 46-ft. wheel, raised stone, and drawn lime and sand for building the walls of the wheel-pit, levelled the ground for flat rods from shaft to the wheel, upwards of 200 fathoms in length, and cleared up an old shaft on the north lode. Among the materials we have purchased are 400 feet of timber for making launders to cross the valley, together with a 46-ft. wheel, bucket rods, &c. Nine miners are now employed on the north lode, and have cleared the shaft 11 fms. from surface. Here the old men have taken away the lode from this depth, and left nothing standing but a few arches; the lode in these arches produces rich work for tin; this lode has been worked on by the ancient miners as much as the middle lode. We may expect to sink 6 fms. without the assistance of the wheel; this can be done by six men by the time the wheel is ready. I shall then recommend a small line of rods, about 15 fms., in connection with the main rods pumping from the new shaft, and sink upon this lode 10 fms.; then drive east and west; and I am confident we shall soon afterwards be in a position to send tin to market from this lode.—Middle Lode: There is no doubt on my mind, from what has been seen of this lode, that it will yield profit at the first level below adit. I hope, if the weather continues favourable, that the wheel and pumps will be in good course of working by the end of February.

GREAT SHEBA CONSOLS.—The following reports have been addressed to the adventurers:—In conformity with your request, I have carefully inspected the Sheba sett. This mineral property is situate in the valley north of the Holmbush Mines, in the parish of Stokeclimsland, and at the foot of Kit-hill. The formation is the ordinary metalliferous killas, or clay-slate of the district, and is intersected by several lodes, cross-courses, and flookans, as shown by the accompanying rough sketches, to which I beg reference. The lodes running from the Devon Great Consols, westward, pass through a variety of hard schoriaceous clay-slate, and are comparatively unproductive of copper, until they arrive at and intersect the Holmbush cross-courses, where the first, and only important copper ground is seen. Consequently, the Great Sheba Consols sett is favoured by almost every circumstance to render it not only the best in that neighbourhood, but also a permanent productive mine, and only requiring a moderate outlay to lay the main bunch of ore open. I expect the great bunch of ore will be situated between the main cross-courses, with a few smaller bunches between the lead courses; and if I mistake not, the ore will be found at a shallow depth. Two lodes will join within the limits of the sett, and thus cause, doubtless, one very wide lode. The visible part of the main lode in the present shallow level predominates in black jack (sulphuret of zinc), and this is so impregnated with the yellow, black, and prebably grey, copper ore, as to give a produce of about 6½ per cent. of copper. Should the bunch extend eastward to the east cross-course, levels may be driven from the old shaft of Wheal Martha, westward, so as to expedite the explorations, if deemed necessary. However, what ought to be done now is to sink a shaft immediately near the bunch—say down to the 30 or 40 fm. level, cross-cut the lode at the 20 fathom level, and put up a large water-wheel for pumping. I see nothing whatever to apprehend in this sett; and I look forward to see it shortly one of the most productive mines, according to its extent, in this district. Having a very good engineer in your other mines, I think you cannot do better than to allow him to prepare your machinery; therefore, I need not dwell on such details, but should be happy at all times to render my advice to the engineer, the miner, or yourselves.—EVAN HOPKINS.

I have carefully inspected the above mine. The greatest point of interest that struck my attention was the lode in the adit level, westward; this level has been driven about 50 fms. on the course of the lode; the lode varies in size from 2 to 8 ft. in width, its composition is spar, with mundic, blende, and yellow copper ore, it is also stained with green carbonate of copper. About 10 fms. behind the end four men are employed in rising for an air-shaft; the lode in this place is about 8 feet wide, and contains some strong spots of yellow copper ore; it has a very promising appearance, and bids fair for making ore in depth; I should, therefore, recommend the sinking of a perpendicular shaft to take the lode at about 30 fms. deep, where (from the appearance of the lode in the adit) you may reasonably expect to see a profitable lode.—ROBERT DUNSTAN, agunt of the West Caradon Mine, St. Cleer, Liskeard.

In compliance with you request, I have inspected the above sett, and beg to furnish you with the following report:—The situation of this sett is very good, being in a highly mineralized stratum of killas, bordering near the granite, and through which are several parallel lodes. The principal, a champion one, is laid open by an adit driven west on its course about 50 fms., the lode being in size from 1 to 8 ft. wide, underlying north, composed chiefly of capel, mundic, blende, and quartz, with black and yellow copper intermixed; in driving this adit two cross-courses are intersected, underlying west; the distance between these cross-courses is about 37 fms., and for this length the lode presents a very flattering appearance, and fully warrants the investment of a sufficient capital to give it an effectual trial. In laying open this mine in depth, these cross-courses will be of considerable advantage for cross-cutting from one lode to the other; and I believe that if these lodes are laid open in depth, that large deposits of copper ore will be met with, and I would recommend a spirited trial being given to them.—SAMUEL SECCOMBE, agent of the Phœnix Mine, St. Cleer, Liskeard.

— *Jan.* 29.—Our wheel-pit is completed, so that the masons can commence building: Mr. Mathews' instructions are required, when they will commence with spirit. The lobby will be completed in a few days. The Vatcher's shaftmen have holed the lobby to the shaft, and let down the water—they will resume sinking again immediately; in bringing up this lobby we crossed the lode, which presented a most splendid appearance. This shaft is down about 6 fms. from surface, and we have drained it 5 fms. deep by the lobby; this, of course, will be a great advantage in sinking, as it takes off all the surface water, and will enable us, so far as we can now judge, to sink so as to intersect the lode by the shaft, which is 7 fms. deeper, and, if I am right in my judgment, we cannot fail in having a paying lode to that point, both east and west of the shaft—such indications I never as yet saw turn up a blank. Our north engine-shaft is sinking in beautful soft clay-slate; the men were engaged last week in cutting ground around shaft, to take up the very powerful streams of water that proceeded from the shaft, about 3 fms. from surface. The week previous the men sunk 8 ft., and I expect they will repeat the same this week. I am happy to state that Mr. Hopkins's doubts would now be removed if he were to see the beautiful channel of ground now sinking in, and he would altogether agree with me that the eastern hill is nothing but a mere cap overlapping a more congenial country. In driving the deep adit the lode is getting more compact and regular; west of the cross-course, there is now visible two well-defined walls, but it is not yet in possession of its properties, as before it touched the cross-course. We hope to get down 20 fms. in the north shaft, as well as intersect Vatcher's lode by the shaft, some time before the machinery is completed—that is, if the water is not too powerful. I expect in sinking Vatcher's shaft a few fathoms deeper, that we shall meet with the same channel of ground as in the north shaft. I have been busily engaged the last week in dialling the lodes, but my progress has been slow, owing to the unfavourable weather; however, I hope in a few days to complete it, and get a proper plan and section out, with the lodes and cross-courses marked in their proper position. In stoping the back of the adit, we are still breaking some very good rocks of ore.

HAWKMOOR.—The 30 fm. level, east of the shaft, is driven about 10 fms. where we have cut the cross-course that heaves the lode northward about 6 ft. We have driven a cross-cut, and found the lode, but have only just cut into it, and are, therefore, unable to state its size or value; for 2 ft. in, where seen, it is composed of ore, prian, mundic, fluor-spar, and peach. The tin that was found in this part of the lode, in the 20, is worn out; it is a very promising lode; the rise in the back of this level, west of the shaft, is producing some good work; the end is still suspended for want of air. In the 20 fm. level, west of the shaft, the lode is worth full 6 tons per fm., and still improving.

HEIGNSTON DOWN CONSOLS.—No lode has been taken down in the 45 fm. level east since last reported. The lode in the 35 fm. level produces some good saving work for copper ore. The other points of operation are stationary since our last.

HOLMBUSH.—The ground in Hitchens's engine-shaft, sinking below the 120 fm. level, is favourable, down about 6 fms. from the bottom of the level. The ground in the 132 fm. level cross-cut is also favourable, and extended to the north side of the shaft; after the centre part of it is reached, we shall rise against it, and cut trip plat at one and the same time, if possible, to expedite the work and sink another lift below the present one, or 132. The lode in the 132 fm. level, west of the great cross-course, is 20 in. wide, producing 4 tons of copper ore per fm.; the lode in the stopes in the back of this level will produce 4 tons of ore per fm. The lode in the 120 fm. level, west of the lead course, is 15 in. wide, producing 2½ tons of copper ore per fm.; we shall drive the 110 over it in a few days. The flap-jack lode in the 120 fm. level, east of great cross-course, is 16 in. wide, composed of mundic, spar, blende, and stones of copper ore. The lode in the rise over this level is 15 in. wide, composed of spar, mundic, and stones of ore, opening tribute ground. The lode in the winze directly over this will produce 2 tons of copper ore per fm. The flap-jack lode in the 100 fm. level is 3½ ft. wide, composed of mundic, spar, and stones of copper ore, and letting down a pretty deal of water, although the ground is tolerably hard; the same lode in the 100 fm. level, east of the great cross-course, is 2½ ft. wide, producing 3 tons of ore per fm., and we hope a further improvement will speedily take place; the lode in the winze sinking below this level (15 fms. east of the cross-course) is 4 ft. wide, and will produce 4 tons of ore per fm.

HENNOCK.—We have commenced sinking the engine-shaft under the 20; I have set 10 fathoms to nine men, at 120*l.* Having to carry the shaft 2 ft. larger, I have given them 20*s.* per fm. more than they had last time. I hope they will complete their contract in three months, or by the end of April.

KIRKQUDBRIGHTSHIRE.—At Stewart's shaft, the lode in the 74 end west is 3 ft. wide, very kindly for lead, yielding about 5 cwts. of lead per fm. At Gilpin's shaft, the lode in the 62 end west is 4 ft. wide, a strong kindly vein, with good stones of lead. The lode in the 50 end west has improved in appearance; it is 4½ ft. wide, with kindly ground for lead. The lode in the 40 end level is 4 ft. wide, with a friable spar and hookah, and some fine stones of lead.

LAMHEROOE WHEAL MARIA.—Some very fine stones of copper have been obtained from the 50 fm. level, peacock ore; that lode appears to be improving, and turning entirely to copper. There is no change whatever on the B lode; in sinking deeper it is precisely the same as reported before, from 5 to 6 ft. wide, containing abundance of gossan and mundic, stained throughout with copper. The shaft is holed to the winze, so the sinking will proceed at once, if the water permits—viz.: when the whim is completed, and the water buckets ready. A temporary shed is erected, and a small quantity of ore backed. I have directed ore to be selected from the pile, so as to make up a parcel of 20 tons or so. The champion lode on which Addis's shaft is sunk is the same as last reported—a large poor lode. I am carrying on a few costeaning pits for a day or so, to ascertain the value of that lode eastward of the cross-course, and anticipate what our driving at the 60 north may come to. The lode is not yet taken down in the 50 fm. level engine-shaft, and Jessie's shaft, on the B lode, has not commenced sinking yet. On Monday our operations will be vigorously continued—Saturday was our setting day. We let the bargains as follows:—The 60 fm. level cross-cut north to six men, at 10*l.* per fm. The 50 fm. level east to six men, at 9*l.* per fm. The rise from the 60 to the 50 fm. level, on the tin lode, at 8*l.* 10*s.* per fm. We are determined to prosecute the B lode vigorously, so we set Jessie's shaft to sink to eight men, at 10*l.* per fm.—making four cores of six hours each.

— *Jan.* 29.—I find the tin lode in the 50 holding well for tin; the copper, I believe will not continue long, the construction being more favourable for tin ore. The lode in the present end (which is 8 fathoms on the lode) is more than 1 ft. wide, composing the leader, and it is pretty uniform throughout the level. By the end of this month we may have 100 tons of good tinstuff at surface. When the 50 and 60 are communicated by the winze, and the upper levels opened, we shall be in a position to make regular returns of tin; and preparatory for that we are arranging to have estimates for the erection of a small wheel to carry four to six stamp-heads, and some small calcining ovens, which may involve an expenditure of 150*l.* to 200*l.*, to begin with. The whim not being quite completed, and the constant rains flooding the land to such an extent, prevents me making any further remark for the present on the B lode. We have commenced this morning to select and dress the ore from the winze on the B lode; and we may get 20 to 30 tons in the course of a month, but the black oxide being soluble, even the exposure to the heavy rains and streams of water has dissolved much, and reduced it, rendering it poorer. However, we expect it will fetch an average price, but it is no criterion of the lode. The champion lode is suspended, as I mentioned before, on account of the water.

LEWIS.—In the 90 cross cut the ground is hard. The north lode in the 80, east of copper ore shaft, is 2 ft. wide, composed of brent and spar; in a month we hope to get under where the lode was productive in the level above. The new lode in the 50, west from copper ore shaft, is 8 in. wide, producing a little tin. The new lode in the 40, east of tin shaft, is 1 ft. wide, composed of quartz and tin capels, producing good stones of tin; ditto, west of copper ore shaft, this lode is 14 in. wide, opening tribute ground; the south lode, east of ditto, in this level, is 1 ft. wide, with promising appearance. The new lode in the rise over the 30, west of copper ore shaft, is 10 inches wide, opening good tribute ground. The new lode in the winze sinking under the 20, west of copper ore shaft, is 1 ft. wide, opening tribute ground; the south lode in this level, east of said shaft, is in disordered ground. The new lode in the 30, east of Praed's shaft, is 18 in. wide, producing good stones of tin, opening tribute ground; the appearance of the lode in this locality is stronger than in any other part of our operations, and which was only discovered by a cross-cut 50 fms. further east than any other part of our workings. I have no doubt but our mine will open well in this direction. The tribute ground is looking well.

LLWYNMALEES.—The lode in the 14 fm. level has very much improved, and the lode in the rise to meet the western winze looks better than it did. In the western winze the lode does not appear so well, although the stuff drawn up turns out well; the stopes from 11 to 20 fms. west of western winze, over the 8 fathom level, look very much better than last reported. In the 8 fathom level west we have this week had some nice stones of ore, but we shall not reach the junction of the north and south lodes until we are 2 fms. or 3 fms. more west. The water will, I expect, be out of the London shaft on Tuesday (28th Jan.) The western winze, and the rise to meet the western winze from the 14 fm. level, will be communicated on or about Friday (yesterday), when we shall be enabled to stope the ore ground under the 8 fm. level west and east of western winze.

NEW COPPER BOTTOM CONSOLS.—My report of this mine is still more favourable than last week. We are now taking down the north part of our east and west lode, which is much improved; the grey and black ore is as rich as I have ever seen, and the further we drive the better it gets; the lode is 10 ft. wide, all impregnated with grey, black, and yellow ore, with spots of malleable copper, and the spar is beautiful, such as may be seen in a large bunch of gossan ore—nice soft white spar.

NORTH BULLER.—The engine was put to work on Wednesday, the 15th Jan.; at the time stated in our last report; everything went on as smoothly and easily as we could wish, and I think nothing could be altered to make it better; the water was soon in fork, and the sumpmen have re-commenced sinking Louisa engine-shaft. Yesterday being our monthly setting, we set 2 fms. to sink at 13*l.* per fm. The lode that was last cut in this shaft (which was reported), in consequence of its north underlaying, has now left the shaft, but is still seen on the north side, from 18 in. to 2 ft. wide, containing good stones of copper ore, having a very promising appearance, and in a pretty stratum of light killas. We purpose driving a cross-cut south of this shaft to cut the Louisa lode, when the shaft is down about 30 fms. from surface. The adit level driving east on King's lode is much the same as when last reported—set 2 fms. to drive at 5*l.* per fm. Part of the surface men are engaged covering the engine boiler, &c., and the remainder making leats to carry off the top water, assisting the carpenters about fixing balance bob, &c.

PEN-Y-BANK AND ERGLODD UNITED.—The lode in the deep adit level, driving east from the cross-cut, is much as last reported, large, with small branches of ore. We are still clearing up the old men's workings under the 30 fm. level at Pen-y-bank shaft, and expect to see the bottom the end of this week.

PENZANCE CONSOLS.—*Jan.* 21.—I find you have a very fair lode of tin for 30 fms. in length on the north lode, and should say you could set it on tribute for 12*s.* in 12. The lode in the winze on Carthew's lode is still more kindly, and I believe, from present appearances, it is likely to make the best and the most productive lode; by sinking the winze about 6 ft. or 7 ft. you will be enabled to set a tribute pitch, which can be worked by six men; the lode in this place underlies 4 feet in a fm., and in taking down the ground in the winze on the course of the lode I think other branches of tin will be discovered, which from the indications will fall in with the lode near this place; I think the lode in the top part of the winze is broken off into the south wall, about 6 or 7 feet below the brace; when this winze is holed through there will be a good chance for taking down the lode, which I consider will be found to be very productive, and when the lode is taken down to the level, I should recommend to continue driving the present cross-cut, which I think is likely to cut other branches of tin, as well as the south lode.

— *Jan.* 27.—Since my last report, in driving the cross-cut south we have had good branches of tin, and I consider that we are near the lode. The lode on which our pitches are working on are much better than they have been for some time past. I said in my last report that there was a good branch of tin discovered in the north wall going up behind the old workings; I have the pleasure in informing you this day that the lode is looking better than it was when last reported; it still continues going behind the old workings in all whole ground; it is a pretty good lode of tin, and, from present appearances, I do think we shall have an abundance of tin from this lode. On the whole, I can say we never looked so well as we do this day.

SIDNEY GODOLPHIN.—Hill's engine-shaft, going down in extremely favourable ground, will be completed to the 20 fm. level by the end of the month, and the required preparations effected for cross-cutting north to intersect Vivian's lode, and south to the Pressure lode, which are but a few fms. from the said shafts; these lodes, in the adit level east and west of the cross-cut at the above shaft, contain a fine gossan, and rich copper and tin ores for a great length. The lode in the adit end, west of the western shaft, is 18 in. wide, producing some rich copper ore; although, at present, not sufficient to value, from its improving appearance a good lode is confidently expected. Vivian's lode, in the adit end, east of the Pressure shaft, is worth about 10*l.* per fm. for copper and tin ores. The Orchard lode, in the adit end east, is 15 in. wide, producing good stones of copper ore, in a fine gossan.

SOUTH WHEAL TRELAWNY.—We are continuing to drive south with six men on the branch we cut in the eastern cross-cut in the 60 fm. level. We also extended last month on the above branch 6 fms. 1 ft. 11 in.; this level is also extended south from shaft about 14 fms., in which the ground is not so favourable as it has been, and also the lode still continues in a disordered state; it is composed of dark killas, capels, barytes, and mundic. Things are in a regular course of working.

TAMAR SILVER-LEAD.—In the 205 end the lode is 2 ft. wide, 1 ft. of which is rich work. In the 190 end the lode is 6 inches wide, composed of spar and ore. The 178 end is suspended until the winze is holed to the 160 fm. level, which we hope will be done this week. In the 160 end the lode is 2 ft. wide, and producing work of a moderate quality. In the 145 the lode is 3 feet wide, composed of capel, hornspar, and ore—a promising end. We have a communication in the 160 fm. level from the engine-shaft to Spurgin's shaft, and set to fix pent-house, cut plat, &c., preparatory to sinking Spurgin's shaft below this level. At north mine, in the 90 fm. level, we expect we have got through the west lode, which is split into several branches, composed of capel, with spots of ore; we intend, therefore, to commence driving north on the eastern lode. In the 80 end, driving north, the lode is still about 1 foot wide, composed of capel and fluor-spar, with good stones of ore. In the 70 end this lode is 4 ft. wide, orey throughout, and producing work of a coarse quality; in the winze sinking below this level the lode is 2½ ft. wide, good saving work. We hope to sample on the 1st Feb., but the quantity is at present unknown; by means of our putting in a new cylinder at the whim-engine, we have been unable to draw up the tributers' work.

TINCROFT.—Highburrow tin lode, at the engine-shaft, sinking under the 152 fm. level, is 6 ft. wide, worth 16*l.* per fm. In the 142 fm. level, east of Martin's east shaft, the lode is 5 ft. wide, worth 16*l.* per fathom. In the 132 fm. level, east of Martin's east shaft, the lode is 5 ft. wide, worth 38*l.* per fm.; in the winze sinking under this level the lode is 5 ft. wide, worth 16*l.* per fathom. In the winze sinking under the 120 fm. level the lode is 5 ft. wide, worth 15*l.* per fm. Chapple's lode, in the 120 fm. level, west of the engine-shaft, is 4 ft. wide, worth 18*l.* per fathom for tin and copper. In the winze sinking under the 100 fm. level, west of downright shaft, the lode is 5 ft. wide, worth 16*l.* per fm. for copper. In the winze sinking under the 90 fm. level west the lode is 7 ft. wide, worth 18*l.* per fm. for copper. On Grout's lode we are extending the 70 and 80 fm. levels on the south or flookan part—in the course of a few weeks we shall commence taking down the lode. The tribute pitches on this and North Tincroft lode are yielding well. At North Tincroft, the lode in the engine-shaft sinking under the 110 fm. level is 5 ft. wide, producing stones of grey ore. In the 110 east the lode is 3 ft. wide, worth 10*l.* per fm.; in the west end, same level, the lode is 3 ft. wide, worth 12*l.* per fm. In the 100 fm. level, east of Willoughby's shaft, the lode is 3 ft. wide, worth 10*l.* per fm. for tin and copper; in the 100 fm. level, west of engine-shaft, the lode is 9 ft. wide, worth 18*l.* per fm. In the 90, east of Willoughby's, the lode is 3 ft. wide, worth 8*l.* per fm.; in the 90 west the lode is 3 ft. wide, worth 8*l.* per fm.; in the winze sinking under the 90, on south lode, the lode is 4 ft. wide, worth 6*l.* per fm. East Pool lode, at Palmer's shaft, sinking under the 100 fm. level, is 3 ft. wide, producing stones of copper ore. Druid lode in the 50, driving east of engine-shaft, is 3 ft. wide, with spots of ore.

TREHANE.—In consequence of the incessant rains of late, which has caused a great influx of water through the mine here, we have been prevented doing anything in the 80 fm. level; it is now, however, drained, and we shall force the ends with all speed—the lode is without alteration since last report. The lode in the 78 fm. level is large, and worth 9*l.* per fm.; the stopes in the back of this level are on the whole somewhat improved, worth from 7*l.* to 8*l.* per fm. The lode in the stopes in the back of the 55 fm. level, although hard for working, are worth 12*l.* per fm. The lode in the stopes in the back of the 45 fm. level are worth about 6*l.* per fm. Our next sampling will be about 55 tons of best quality ore, and of No. 2 parcel 40 tons, which will be ready some time next week.

TRELAWNY.—Trelawny's shaft has not been sunk since last report in consequence of water, as was then explained; we hope, however, to get the lift to work in Smith's shaft in about a week from this time. In the 92 end, north of Trelawny's shaft, the lode is 4 ft. wide, worth 9*l.* per fathom; in the south end, in the same level, the lode is 3½ ft. wide, worth 9*l.* per fm. In the 82 north the lode is 3 ft. wide, worth 16*l.* per fm.; in the winze in the bottom of the 82 the lode is 3 ft. wide, worth 10*l.* per fm. In the 72 north the lode is 3 ft. wide, worth 9*l.* per fm. At the north mine, Smith's shaftmen have been, and still are, employed fixing the pitwork from the 55 fm. level to the surface. In the 55 end, north of ditto, the lode is 2 ft. wide, worth 6*l.* per fm. In the winze in the bottom of the 40 fm. level, the lode is 1½ ft. wide, worth 4*l.* per fm. In the 68, north of Trehane, the lode is 1½ ft. wide, with stones of lead in it. Our stopes are much as usual. We sampled on Wednesday last, No. 1 crop, computed 100 tons; and No. 2, common, computed 70 tons, of ores.

TRELEIGH CONSOLS.—Christoe Lode: In the 100 fathom level, west of Garden's, there has been no lode taken down this week. In the 90 fathom level, west of ditto, the lode is 2 ft. wide, worth 7*l.* per fm.; in the stopes above the 90 fm. level the lode is 2 ft. wide, worth 15*l.* per fm. In the 80 fm. level, west of cross-cut, on the north part, the lode is 18 in. wide, with stones of ore. In the 70 fm. level, west of Garden's, the lode is 1 ft. wide, not much ore.—Parent Lode: At Parent engine-shaft, below the 52 fm. level, we are sinking in the country; in the 52 fm. level, east of ditto, the lode is 2 ft. wide, but little ore. In the 30 fm. level, east of ditto, the lode is still in disordered ground.—Middle Lode: In the 40 fm. level, east of cross-cut, the lode is 18 in. wide, with stones of ore, and is looking more kindly. In the rise above the 40 fm. level, east of cross-cut, the lode is 15 in. wide, with stones of ore. At Burgess's shaft, from surface, we are sinking in the country for the middle lode.

TRETHEVY.—Our shaft has been sunk 2 ft. only during the past week, in consequence of the great increase of water by the late excessive rains, and it appears impossible to proceed more expeditiously under present circumstances. I would beg to suggest that a plat be immediately cut, and a cistern fixed to take up the water, when I think we shall be able to sink 6 feet in as short time as it now takes to sink 3 ft.; in fact, what makes it more imperative is, that the men find it almost impossible to bear the work from the great fall of water, there being nearly 100 gallons per minute coming from the lode standing about 4 fms. up from the bottom; I hope to have your permission to proceed with this work by an early post.

UNITED MINES (Tavistock).—The improvement in the Rix-hill lode is only about 40 fms. to the west of our boundary, and the lode runs through our site for nearly a mile. Our 20 fm. level will intersect the lode deeper than the point at which the discovery was made, and it can easily be worked on from our levels down to the 90 fm. level; the lode is quite as valuable as stated in my letter of the 13th of Jan., producing more than 2½ tons of tin per fathom, and the bottom is better than the back of the level. The engine-shaft is being put into perfect repair with all dispatch, and the operations are progressing most satisfactorily. The water is taken, and the shaft secured to the 30 fm. level. The boiler-house will soon be ready to receive the new boiler.

WARLEGGAN.—In the stopes in the bottom of the adit the lode is 8 feet wide, good work, and from the appearance of the ground in the north cross-cut I think we are not far from a lode at this point also; and I hope by this time next year we shall want another such wheel as our present for stamping purposes only.

WEST DOWN CONSOLS.—Since our last meeting the engine-shaft has been sunk to the depth of 10 fms. under the adit, and the cross-cut driven south towards the lodes 14 ft.—I expect there are near 3 fms. further to drive to intersect it. From the appearance of the lode where seen above this point, and judging from the tin already broken from it, there is great probability of its being productive. The lode would have been cut about this time had not a plate in the boiler been defective, whereby we have been obliged to take it out to put it under repair; and I think whilst out it would be the most prudent step to have it lengthened about 4 ft., the present tube in it being rather small. As we progress in operations, either by sinking, or adding more stamp heads than already attached, it would be desirable to have more capacity in the boiler for a reserve of steam.—James Carpenter,

WEST GOGINAN.—The adit level, driving east from the shaft, on the north lode, is much as last reported, from 5 to 6 ft. wide, composed principally of gossan, mixed with jack, spar, &c., spotted with lead ore. The same level, driving east from the shaft, on the south lode, is rather improved since my last report, as it is from 7 to 8 ft. wide, with several small branches of ore, more than we have seen before since we commenced driving from the shaft.

WEST PHŒNIX.—We have commenced building the engine-house, and should the weather prove favourable, I am of opinion that we shall not take long to accomplish it, as there will be from 10 to 12 masons and labourers at work, and likewise we have the first lot of stones for the building. We have also contracted for the lime with Northey and Weeks, at Calstock Quay, for 1*s.* 8*d.* per bushel (24 gallons), to be delivered on the mine, which is the lowest tender—lower than any other by 10*d.* to 14*d.* per bushel.

WEST WHEAL JEWEL.—The 70 fm. level, west of Hodges's cross-course on Wheal Jewel lode, is worth 7*l.* per fm. In Carkeeks' winze, sinking in the bottom of the level, lode unproductive. Quarry shaft, sinking below the 42 fm. level, on Tolcarne tin lode, is suspended for the present, in consequence of a great increase of water; these men are put to rise in the back of the 57 fm. level, west of Hodges's cross-course, on Tolcarne tin lode. The 42 fm. level, driving west of Quarry shaft, on same lode, is also suspended for the above reason; these men are driving south in the 12 fm. level, in search of more tin lode. The 57 fm. level, west of Hodges's cross-course, on Tolcarne tin lode, is worth 6*l.* per fm.; the 57 fm. level east, on same lode, is worth 4*l.* per fm. The stopes in the back of the 12 fm. level, west of Pryor's winze, on same lode, are worth 10*l.* per fm. The stopes in the bottom of the 12 fm. level, east of Tregoning's shaft, on same lode, are worth 27*l.* per fm. The stopes in the bottom of the level, west of Tregoning's winze, are worth 22*l.* per fm. These stopes are working on tribute.

WEST WHEAL SETON.—The south shaft is sunk 11½ fathoms below the 70 fm. level; the lode is composed of flookan, mundic, and spar, with occasional stones of ore. The lode in the 70 fm. level, west of the south shaft, is 2 ft. wide, producing one ton of ore per fm.; the stopes in the back of this level, west of shaft, will produce 3 tons of ore per fm. The lode in the 55 fm. level, west of the south shaft, is 3 ft. wide, producing one ton of ore per fathom. We have commenced sinking a winze in the 45 fm. level, west of the south shaft, on the south lode. Since the last report no lode or branch has been intersected in the 50 fm. level cross-cut north of the engine-shaft, but we expect in driving about 5 fms., to intersect a lode. The 50 fm. level cross-cut has been extended about 60 fms. south of the engine-shaft, and we expect in a few fathoms further driving to intersect the south lode, which underlays north.

WEST WHEAL VIRGIN.—Our tin ground in the engine-shaft is working very well indeed. We are now 9 fms. under the 9 fm. level, and the tin lode much larger, and worth more per fathom for tin than when we began to sink. I expect to be down the 10 fms. by the time I stated when in London. I think we have more tin on the surface than I stated to you in London.

— *Jan.* 27.—We are still sinking the engine-shaft by nine men. We are down 9 fms. under the 9 fm. level. We have still a kindly lode going down, with good stones of tin. We shall sink 6 ft. deeper, and then we shall drive east and west of the engine-shaft, and drop our lift to that level, after we have extended the levels from the engine-shaft. We shall then sink the shaft again. In a month's time we shall be working on more of the lodes that we have got in the sett.

WHEAL ADAMS.—Having driven 9 ft. further south in the 72 fm. level, as proposed in our last report, we commenced cross-cutting west, and have cut about 2 feet into the lode, which is, so far, grey throughout; we cannot, of course, value the lode until it is cross-cutted to the western wall; but, should the whole of it prove as productive as the part already explored, it will turn out from 8 to 10 tons of lead ore per fm.; the water is issuing in large quantities from every part of it, but the part first cut into is draining. The rise in the 60, in the black ground, produces 10 cwts. of lead ore per fm. The stopes in the pitch will produce about 12 cwts. per fm., ground in the latter rather hard. No alteration worth reporting has taken place in the 50 rise. The stopes in the 40, north of the old engine-shaft, are much the same in the north, but in the south of the rise they are much deteriorated. The lode cross cut in the 28 fm. level is 2½ feet wide, and will produce at least 12 cwts. of ore per fm.; it is improving going north. The men have been timbering in the 40, and, consequently, they have not cross-cutted the lode; we cannot, however, be more than 3 ft. from it. The stamping engine would have been set to work on Saturday, but the ironfounders failed to send us two connecting pipes for the boiler, which boiler is repaired, fixed, and comp ete for working, with the exception of the pipes in question. At Aller, the vein cut through is about 18 in. wide, and consists of grey quartz, containing copper pyrites, producing, when cleared, 18½ per cent. of copper, and 10 ozs. of silver to the ton. We do not look at this of itself to be of much importance, except that from its bearing and dip it is more than probable large quantities of lead will be found deposited on it. We sampled, on Saturday, a parcel of lead ore, computed 50 tons, and forwarded samples to the purchasers. We will assay the ore forthwith, and the results shall be forwarded to you.

WHEAL ARTHUR (Calstock).—We have been through the adit level as far west as the main western engine-shaft, and in a few days the level will be all clear as far west as that shaft. I would recommend four or five sets of timber to be put in this shaft, and erect a whim; after this is done, I would put six men to drive on the silver-lead lode north, in order to cut the north copper lode, as I have been informed by men who were formerly employed in sinking this shaft, that they cut a very fine silver-lead lode about 25 fms. under the surface; I think we ought not to lose any time in proceeding with this work at once. The tributers are getting good wages at the price they have for their pitch.—*Jan.* 26.

We shall have to drive about 15 fms. before we cut the north copper lode; I cannot say for certain what I shall be able to set it for before we timber the shaft and fix a few ladders; I think the ground will not cost more than from 50*s.* to 60*s.* per fm. The silver-lead lode mentioned in my last has never been seen anywhere in the mine except in the engine-shaft, in sinking through the lode, about 25 to 30 fms. under surface; there were several kibbles of good work for silver-lead drawn up from that place, and nothing more done to the lode since. I think this is the main object to attend to at present, as we shall have a chance of raising ore enough at that level to pay for a good engine, and put the shaft down any depth we may require.—*Jan.* 29.

WHEAL AUGUSTA.—I was underground in this mine on 25th Jan., and noticed every part of our underground workings, and am fully convinced we shall raise a good quantity of tinstuff after a few months. Our plunger lift is now fixed, and the engine-shaft timbered from surface to the 18 fm. level. I set the engine-shaft to sink under the 18 fm. level by six men—to sink 12 fms. for 100*l.*, and, if the men complete the 12 fms. on or before the end of May, to have 6*l.* as a present—this is to encourage them to work well. I have also set the 18 fm. level to drive west of engine-shaft by three men; in this end we have a lode of tin 4 ft. wide. I fixed to drive the 18 fm. level east from engine-shaft—the lode in this end looks well; I have set a stope in the back of the same level, west of engine-shaft, by four men; this is to stope a piece of tin ground home to boundary shaft. I intend sending you the section of our working in a few days, when you will be able to notice were our miners are working.

WHEAL CREBOR.—Our setting on Saturday last was as follows:—The 30 fm. level, west of Gubbins's rise by four men, at 8*l.* 5*s.* per fm.—stent the month out. The 40 fm. level, west of Rundle's, by six men, at 5*l.* per fm.—stent as above. A rise to the west of the cross-course, lately discovered at the adit, or 54 fm. level, west of Rundle's, by 6 men, at 3*l.* per fm.—stent the month out. The cross-cut driving south at Gill's, by two men, at 3*l.* per fm.—stent the month out. The 12 fm. level, west of Cock's shaft, by two men, at 6*l.*—stent the month. The winze is suspended, as the rise above named, from the back of the 54, to the west of the cross-course, will prove the lode to some extent at that point, at a great saving of time and money. This part of the mine is looking very encouraging. The heavy rains have somewhat impeded our progress at present. The water being in Cock's shaft, we have not yet let the tribute pitches, but intend to do so as soon as it is out. Our mine, upon the whole, is greatly improved. As I expect Capt. Richards will give you his report, it is needless for me to enter into details.

— *Monthly Report.—Jan.* 27.—On Saturday last I inspected this mine, and beg to hand you the following report of the same:—In the 54, or adit level, west of Rundle's shaft, a cross-course has been met with, and found to be from 10 to 12 feet wide, containing flookan, spar, and gossan; the lode up to the point of intersection of the cross-course is small and unkindly, being a mixture of capel, spar, and killas; on the western wall thereof, however, a change for the better has taken place, the lode being larger (2 feet wide), containing capel, spar, mundic, prian, black and yellow ore, and altogether may be considered very promising; the ground also is more congenial and easier for progress. This drivage, for the present, is suspended, and the men put to rise in the back thereof, on the western wall of the cross-course, which will admit of speedy communication with the 40 fm. level above. In the 40 fm. level, west of Rundle's shaft, but little has been done, the men having been engaged sinking a winze in the same; the lode, however, up to the most extreme point driven on, shows improvement, being 18 in. wide, composed of capels, mundic, and ore; this drivage, however, will again be pushed forward with as much force as can be brought to bear on it, for intersection of the cross-course before alluded to, and more speedy communication with the rise in the back of the 54 fm. level. In the winze sinking below the 40 fm. level, west of Rundle's shaft, the lode is small and poor, being a mixture of capel and killas; this winze is suspended, nothing having been met with to warrant its further prosecution; the lode in the pitch in the back of the 40 is not so productive as last reported on, being composed of more capel and mundic, and the same is for the present suspended, there not being sufficient air to admit of the 40 fm. level being driven whilst the pitch is working. In the cross-cut south of Gill's shaft nothing of importance has yet been met with. In the 12 fm. level, west of Cock's shaft, the lode, although not containing a sufficient quantity of ore to value, is kindly, being composed of capel, spar, mundic, and ore. There is no alteration in any other part of the concern worthy of notice.

WHEAL GILL.—The adit level has been cleared up, and the shaft has been cased and divided to that level. The smith's shop, count-house, and surface buildings, are undergoing a thorough repair. The plans of the engine-house are prepared, and the 70-inch cylinder engine will be removed to the spot with the two boilers as soon as the buildings are ready to receive them. Mr. Matthews, of Tavistock, has been appointed the engineer.

WHEAL HAMLYN.—We have still a quantity of mundic in the caunter lode, and the lode altogether appears promising.

WHEAL HARRIS.—The lode in the 25 fm. level west is about 6 in. wide, producing good stones of lead ore in places; in the same level east the lode is about 18 in. wide, composed principally of spar, and also good stones of lead ore occasionally.

WHEAL LANGFORD.—Since my last we have no material alteration in the prospects of the mine. We have now about 27 cwts. of silver ore ready for the market, producing 42 ozs. to the ton, and 20 cwts., producing 214 ozs. to the ton, samples of which are forwarded to the smelters; on hearing from them I will forward all particulars.

WHEAL MARY EMMA.—*Jan.* 13.—Operations having been chiefly confined to stoping the bottom of the deep adit level for a considerable time, without producing such beneficial results as I suppose were anticipated by the projectors of such mode of proceeding, I should recommend your attention to sinking on the course of the lodes under the adit level, as soon as the piece of tin ground now standing above the level, and under the rise communicating with the shaft at surface, has been broken down, which I think will occupy about three weeks from this time; in the interim, you will ascertain the value of the lode more satisfactorily, to enable you to judge whether or not it would be prudent to prepare rods, &c., to attach to the powerful water-wheel already erected, to carry out the operations in a more systematic and spirited manner than has hitherto been devised. Having had repeated opportunities of viewing the lode whilst it has been in the course of stoping from the entrance of the adit level to the point now arrived at, I most unhesitatingly pronounce it to be a very good improvement, and one that is likely to continue, as the bunches and layers of tin ore are become collected and more settled than heretofore in all the explorations made, either by sinking, driving, or stoping—consequently, with such prospects before you, I think no time ought to be lost in carrying out the necessary work with vigour. The lode where the present shoot or course of tin came in, so far as it has been developed, the length of which is 18 feet from the western end, where I would suggest the shaft to be sunk, is worth 19*l.* 10*s.* per fathom. The other smaller shoots of tin passed over further east will, no doubt, from their dip or inclination being west, be met with in the shaft at 10 or 12 fms. below the adit, which is already 10 fms. under the surface, whereby it is fair to presume, at no distant period, your mine will be productive of a large quantity of tin ore, as the lode is large and continuous for a considerable extent, as already seen, as well as its mastery over the stratum it passes through; therefore, there is not the slightest doubt on my mind of its being thrown out of the regular course by any convulsion of nature, which may be contiguous, as the specific gravity of the lode, compared with the capels and stratum concomitant, are so anomalous, that the lode indicates predominance. There will be 2 tons of tin ore, of very superior quality, ready for market in about three weeks, I should think worth more than 50*l.* per ton, at the present price of white tin.—James Carpenter.

— *Jan.* 27.—The shoot of tin lately discovered and reported at the meeting on the 13th inst. still continues; the lode has somewhat increased in size, and has produced some very rich work for the stamps, particularly from the bottom of the level. We are working eight stamp heads; but our dressing operations have been retarded by the continuous stormy weather.

WHEAL PROVIDENCE (South Sydenham).—The lode in the adit end east is still large, and very promising. In driving north-west of the whim-shaft we have cut the lode: it is 4 ft wide, composed of spar, mundic, and prian, intermixed with copper ore—a very kindly strong lode. The walls of the engine-house are nearly completed.

WHEAL TOM.—We have cut the great tin lode within 30 fms. to the bottom of the valley; the lode is all of 5 ft. wide, and a more kindly lode I never saw; I have sent you some tin capels and spar risen from it. We have also discovered a splendid copper lode in the lobby that is bringing up, where we intend to commence our deep adit on the tin lode; this copper lode is about 30 fms. north of the tin lode, and was never seen before to my knowledge. This copper lode is cut in the exact spot that was reported on where there was issuing a large stream of water; the water is coming from the newly-discovered copper lode, which carries tin on the backs; it has changed itself in going down towards the valley from tin and tin capels into a splendid copper lode, composed of gossan, prian, great lumps of bright yellow mundic, flookan, candied spar, and some spots of yellow ore, underlaying north 2 ft. in a fm.—a splendid lode indeed. I shall pitch for the adit at once.

— *Jan.* 27.—Charles Gunn and partners have this week been very busy in cutting plat in the south adit, in order to make room to hang the tackle, to sink on the tin lode. In cutting the said plat, the men cut another branch, 2 feet north of the tin woolfram lode driven on: the branch or limb of the lode is 10 in. wide, composed of wolfram and tin—a very kindly branch, and, from its underlay, I find will fall in with the south of the lode in 10 ft. sinking under the adit, when it may be expected the lode will be more tinny. Thomas Harris and his partners have this week been costeaning, in order to trace down the great tin lode in the valley; but I must tell you we have met with a puzzler, as is common in all mining. We sunk a costean pit 10 fms. east from where we did last week, opening on the tin lode, but, to our surprise, we did not find the lode in its east direction. I then ordered the men to costean north and south; they did so, and, to my satisfaction, found the lode thrown back 12 fms. south, where we have again cut the lode 4 feet wide, composed of fielspar, peach, flookan, capels, large stones of bright yellow mundic, and spots of splendid yellow copper ore; in a word, the lode has changed its features from a tin lode into a copper lode. So much the better, and there must be a cross-course between the pit we sunk last week and the pit we cut the lode in, 12 fms. south of the lode's easterly direction. William Milmans and his partners have this week been bringing up through the valley an open cutting, in order to discover other lodes; and I am glad to inform you this pare of men have opened on another lode, 2 ft. 6 in. wide, underlaying north, composed of iron, gossan, mundic, and flookan; the said lode is 15 fms. south of the copper lode cut in the lobby last week. I have a plan of the sett preparing, and it will be ready in a few days, and on which I intend drawing the different lines, representing the lodes running through the sett, and then send it to you for your inspection. The smith's shop is completed, and we are pushing on our other buildings.

WHEAL TREMAYNE.—At Painter's flat-rod shaft, on the south lode, the shaftmen have been engaged in sinking for bearers and cistern, to fix a drawing lift in the 50 fm. level; the lode in the bottom of the shaft is 3 ft. wide, composed of flookan, killas, and spar; in the 50 fm. level east, the lode is 18 in. wide, composed of flookan, mundic, and spar, with good spots of copper ore; in the 50 west, the lode is 2 ft. wide, composed of flookan, with spots of black ore. In the winze sinking under the 40 fathom level, east of shaft, the lode is 14 in. wide, worth 5*l.* per fm.; at west whim-shaft, on the same lode, the shaft is sunk to the 40 fm. level, but not communicated yet; the lode in the bottom of the shaft is 14 in. wide, chiefly flookan. In the rise in the back of the 30 fm. level the lode is 1 ft. wide, with good stones of ore. At Madron's shaft, on the south lode, in the 70 fm. level west, the lode is 2 ft. wide, opening tribute ground; in the 70 fm, level east, since our last report, we have commenced driving a cross-cut in a south easterly direction, to communicate with the same lode, east of the great flookan, which has heaved the lode a great many fathoms. We calculate we have 25 fms. driving to communicate with Lambo lode, east of the flookan, which has taken about 3 months driving. In the 60 fm. level east, the lode is 2 ft. wide, opening tribute ground. In the 20 fm. level, west of cross-cut, on the new lode, east of Williams's engine-shaft, the lode is disordered by cross branches. In the 30 fm. level, west of Laurie's shaft, on the north lode, the lode is large and unproductive. At middle whim-shaft, on the same lode, in the 16 fm. level west, the lode is 2 ft. wide, and unproductive. In the adit level driving east, on a north lode, the lode is 5 inches wide, producing tin and copper, but not to any value. At Allen's branch, in the 53 fm. level east, the branch is worth 10*l.* per fm. The 45 fm. level east, on Allen's branch, is worth 5*l.* per fm. In the boundary engine-shaft, sinking under the 63 fm. level, driving east on the engine lode, the lode is 18 in. wide, worth 14*l.* per fm. In the winze sinking under the 53 fm. level, on the engine lode, the lode is 1 ft. wide, worth 12*l.* per fm.; in the 53 fm. level east, on the same lode, the lode is 15 in. wide, worth 11*l.* per fm. In the 45 fm. level east, on the same lode, the lode is 1 ft. wide, worth 7*l.* per fm. Our tribute departments looking much the same as it has for some time past.

WHEAL TRESCOLL.—Our flat-rod shaft is down 7 fms. below the 20 fm. level on the course of the lode; the ground about the lode is very fair, but we are obliged to blast the hanging wall, which makes the shaft much stronger, and saves timber; the lode is much altered for the better, and going down more upright, with a beautiful foot-wall. The south B lode is now dropping in the shaft, and will be in the north B lode in a few feet more sinking. We have not cut into the south B lode as yet, to ascertain its value. We expect to have a good course of tin in the shaft when these lodes meet together, as they made very rich west of this shaft, in the 20 fm. level. The lode in the east end is in very fair ground; it is improving, but not rich at present, and there is a quantity of water proceeding from the end. The south cross-cut is still rather hard, but we have cut the branches north of the D lode, and the water is increasing in the end; we have not been able to work regularly in this end. The continual heavy rains this week have thrown so much water into the mine, that our engine can scarcely keep it at 13 strokes per minute, which has greatly thrown us back in our underground operations. I have let the D lode, in the bottom of the adit, on tribute, at 14*s.* in 12., until we can begin to sink the winze again on the D lode.

WHEAL VINCENT.—Since our last report there is not much alteration in the lode in our west end, which is about 4 ft. wide, very good for tin, and has every appearance of producing a great quantity of tin at a deeper level, as we have gone over 55 fms. of a good tin lode, and there is at present every indication of a continuation of the same. Also, according to our calculation, we have now about 3 tons of tin of the best quality ready for the market; we should have had a greater quantity, if we had not been hindered by the water being in with us, owing to the late heavy rains.

In Tywarnhayle Mines, the lode in the 90 fm. level east is now producing 6 tons per fm. The 80 fm. level, west of the railroad-shaft, is not quite so good as it was; it will now produce 3½ to 4 tons per fathom. There is no change any other part. The dressing is somewhat impeded by the heavy rains. Ore sampled on the 28th, 578 tons.

FOREIGN MINES.

ALTEN MINING ASSOCIATION.—Estimated produce for Nov.:—

Mines.	Tons of Ore.	Per Cent.	Fine Copper.
Raipas	80	8½	6·80
Old Mine	80	5	4·00
United Mines	8	5	0·40
Michell's	7	5	0·42
Mancur's	1	6	0·06
Ryper's	1	9	0·09
Total tons	177		11·77

Mining Report from the 23d Nov. to the 9th Dec.

Raipas.—In the stopes west of Monk's shaft the ground continues hard for excavating, but still carrying with it some rich purple ores. In the winze sinking below the 20 there is no alteration to be observed. In No. 11 the ore is still in a very disordered state, and, consequently, we break but a small quantity of prills from this place; it is to be hoped, however, that a change will shortly take place for the better, and fully enable us to realise the anticipations which its first discovery created. In the level driving east we have met with a small vein of purple ore, but as yet it is so small that we dare not speak favourably of it, for fear of raising your hopes too high. In the shallow adit workings the ore continues equally rich as when last reported. In all other parts of the mine things remain stationary, there being up to the present time nothing new worthy of arresting your attention.

United Mines.—We have resumed operations on Ward's lode, in the 40 fathom level, under the tram-road; the produce is good, and the prospects are presenting a kindly appearance, which leads us to hope that the ground now opening will ultimately leave fair reserves for future stopes. Since the workings have been resumed in the sink no material change has taken place; the workings here, on the whole, may be considered poor, arising from the low quality of the ore, but we hope to be more successful in the bargain now commenced in the 40. At Woodfall's the tributers continue to deliver the usual small parcels of good ore, and the prospects of this mine are promising.

Old Mine.—The general appearance of the tribute pitches at this mine continue flattering, whilst the returns of ore are regular, and we hope, on being delivered to the smelting-house, that the quality will be found better than for some time past. The lode in Slungi's sink continues to develope itself favourably, the quality of the ore having improved; our progress, however, is much retarded by the occasional influx of water. In the north east sink the prospects are still more promising, and the ore is of a better quality; judging from present appearances, our produce from this sink alone may be estimated at 3 tons of copper for December. The stopes above the tram-road have also improved, and the tributers are making some fair returns. The roof stope at the Bergmester's hold out very favourable prospects, and the tributers make some good deliveries. In the adit fair progress has been made, and the ground is still favourable for driving.

Ryper's—The workings at this mine, in consequence of the severity of the weather and heavy falls of snow, which prevents our exploring the lode at the surface, have been stopped.

Mancur's.—The severity of the weather and the dark days have compelled us to suspend further operations at this mine until the spring of next year, when we hope to resume all the new discoveries made in this part of your property, with better chances of success.

Michell's—The workings at this mine are greatly deteriorated, and the produce has considerably fallen off. The stopes on Nellen's lode continue poor, and the prospects have not improved; the tributers returns are, therefore, less productive than we expected. The adit level is making very favourable progress, and the ground continues good for driving.

Mining Report from the 9th to the 22d December.

Raipas.—In the stopes west of Monk's shaft, the lode is at present about 6 ft. big, and containing ore throughout; the ground is not so hard as when last reported, and we are, therefore, making better progress. In the winze below the 20 the ground is rather hard, and unfavourable for sinking. In No. 11 we have commenced a winze, which we have now sunk about 2 fms. below the 20 fms. workings, the ground, however, still continues much disordered, and the ore which we are now breaking from this bargain is, in consequence, of a very dredgey nature. In the level driving east the small veins of purple ore mentioned in my last still continue to present the same promising appearance. The lode in the roof stope of the 20 is about 4 feet big, containing rich purple ores, and producing about 4 tons per fm. In the shallow adit workings we have met with a body of slate, which though at present containing some rich purple ores, yet too great a reliance cannot be placed upon it. In other parts of the mine there is nothing new worthy of remark. The dark days and severity of the weather we lately have had to contend with have thrown us back considerably in our dressing operations, so that our produce for Dec. will hardly exceed 4 tons of copper.

United Mines.—The workings under the 40 fm. level continue poor, but the prospects in the new level, to the east, are good, and the lode appears to improve in that direction; the workings are, however, in this part too confined to admit of our applying our forces with advantage; we are, therefore, at present merely opening ground for future stopes. At Woodfall's the tribute pitch is somewhat improved, and the prospects continue good.

Old Mine.—The tributers are making fair returns, but the quality is not quite so good as when last reported. The workings above the adit level have become somewhat deteriorated; the ground is also harder for excavating, and in consequence of which the produce will experience a falling off from this part of the mine. The tribute pitch above the Bergmester's is very promising, but the ore is of a low per centage Slungi's sink is improved, and the returns will be increased in consequence. The new sink to the north east continues equally productive. The lode in the sink to the south of Slungi's is poor, but by next post we hope to see some alteration, as we have commenced sinking through the lode, and it is found favourable for driving. No change is visible in the adit level, but we have every reason to expect an improvement shortly.

Michell's has also been very poor, and the tribute returns have been comparatively trifling; we still expect, however, that the returns will cover the cost. Our present workings are confined to a stope above the adit level, but should no improvement take place in the ensuing two months, further exploration in this mine will be suspended until the spring, and the men employed on more remunerative work at the Old Mine. No alteration is to be observed in the adit level, under the precipice, since the date of my last report. The severity of the weather, and the great falls of snow, have offered many impediments to our ore dressing. Our returns to the smelting-house have, therefore, not exceeded the estimates, in consequence of the low per centages, arising from the mundicky nature of the ore, and which it is almost impossible to extract at this dark time of the year.

QUÆNANGEN MINING ASSOCIATION:—

Quænangen, Dec. 21.—I had the honour of making my last report on the 26th December, which I trust came duly at hand; and, having closed the workings for the two months (Oct. and Nov.), I set the following tutwork and tribute pitches of Nov. and Dec. —viz.: No. 1 adit, towards lode E, six men, *£39½*; No. 2 level from the sink, on lode A, four men, *£42*; No 3 sink from the surface to hole to this level by four men, at *£38*. On these last two pitches the men receive besides *£5* per ton of 7 per cent. ore; No. 4, sink, on the new lode at *£23* per cubic fathom, and a tribute pitch on lode C by eight men, at *£5½* per ton of ore of 8 per cent. The adit on lode C is still in favourable ground. In the months of Oct. and Nov., we drove 3 13-16 fathoms; and I expect we shall do the same the next two months. We have for the present stopped the level on lode C, as the ore was somewhat diminished there; but on the same lode, in the neighbourhood of the tribute pitch, the prospects continue to be good; and I calculate with eight men we can raise 10 or 12 tons of ore monthly—at least, as long as it continues as at present. I am not without hope also that the ore in the level will again improve when the working is re-commenced, which will be as soon as circumstances admit. The prospects continue good for the working on the new lode. The ore is now more concentrated than formerly—being one-fourth of a fathom thick, entirely composed of purple ore. The yellow pyrites apparently diminishes as we get deeper, which we must consider as a favourable circumstance—the richer ore taking the place of the poorer. We have raised about 25 tons from this spot, so that we still hope to have a cargo of 40 tons in the spring. The sink lately commenced on lode A does not yield much ore; but, as this working was undertaken principally to ventilate the mine, we did not calculate on making much profit by it. In the level from the sink on this lode the ore is still inconsiderable, but it is of a tolerable size and regular; so that we indulge a well-grounded hope that the ore will soon improve. Under all the circumstances, we think it well to continue this working as a trial. Besides the before-mentioned 25 tons of ore from the new lode, we have about 10 tons of other ores, altogether 35 tons of ore—part lying at the mines, and part at the shipping place. Mr. Robertson's vessel arrived safe at Kaafjord with a cargo of 36 tons of ore. The master did not think proper to load deeper at this inclement season of the year, which is the reason that the 40 tons were not sent. The materials and provisions sent by the same vessel were landed in safety. The exact result of this cargo is 31·883 tons nett weight, at 10½ per cent.=3·348 tons of copper. As the tribute accounts for the last two months are only just made up, we cannot forward the general accounts by this post; but hope to do so by the next.

LINARES MINES.—The following has been received from Mr. H. Thomas:

Linares, Jan. 18.—The men are getting on well in sinking the engine-shaft under the 30 fm. level, and also with the cross-cut in the 45. Wilson's shaft continues sinking in a good lode, worth 4 tons to the fathom; and the 55 fm. level, driving west of San Anton winze towards the shaft, is of about the same value, opening whole and valuable tribute ground; the 55, driving east, is without change. The 45 fm. level, driving east of Shaw's shaft, has assumed a much more kindly appearance than for many varas past, the ground being fair for driving, and containing soft calcareous spar, with spots of lead. Shaw's shaft, sinking under the 45, is in a large lode, with occasional stones of lead. In the 30 fm. level, driving east of Shaw's shaft, the lode has improved, containing mere calcareous spar, gossan, and lead, worth now 2 tons to a fm. The tribute pitches are turning out well, and the other operations proceeding with steadiness and regularity, and the masons getting on well with the walls of the smelting-house.

Ore in stock at Linares, Jan. 11, 264 tons 18 cwts.; weighed in, Jan. 18, 37 tons 1 cwt. —sent for shipment, 20 tons 12 cwts.; remaining at Linares, 281 tons 7 cwts.; at Seville, 101 tons 11 cwts.; at Malaga, 59 tons; on board ship, 43 tons 8 cwts.: total, 485 tons 6 cwts.

COPIAPO MINING COMPANY.

The half-yearly meeting of proprietors was held at the offices, on Thursday.

CHARLES HEATON ELLIS, Esq., in the chair.

After the usual preliminaries, the following report was submitted:—

Since the meeting in August last, the cargo of copper ores, per *Cuba* (456 tons), has been sold at Swansea, averaging 27¼ per cent., and realised, at *24l.* 17s. 6d. per ton, 6100*l.* She also brought about 60 tons of silver leavings, being the refuse, after the process of amalgamation at Copiapo, which contained 120 ozs. of silver to the ton, and have sold at *27l.* 10s. per ton. The *Cuba* having been offered for re-charter, at the moderate freight of *3l.* 15s. and 5 per cent. per ton, and the directors, considering that their manager could not obtain freight upon better terms, they have engaged her to load a cargo of copper ore, but she is not expected to be ready to load at Copiapo before May. In the mean time, by the last advices, dated Copiapo, 25th Nov. (received on the 23rd inst.), the manager had applied to our agents at Valparaiso for a vessel to load about 450 tons of copper ore, which may be expected at Swansea about May next. The quantity of copper ore raised at the company's mines during the last six months, ending 30th Oct. last, has been only 332 tons, but the monthly reports continue very satisfactory and encouraging, with every probability of considerably increased returns for the future. The manager has already commenced bringing down ores from the new mines at Tres Puntas to the port of Flamenco, and the men were employed in sinking well, &c. This new property, he anticipates, will eventually be of great value to the company.

The total expenditure at the different silver mines, in which the company are interested, including the purchase money of 5250*l.*, has been, to the 30th June last, about 13,910*l.*, and the value of the silver returned from them has been, including the probable proceeds of the 60 tons of silver leavings, per *Cuba*, about 11,580*l.* In addition to which, a remittance of 2000*l.* may be expected by the next mail. The total expenditure at the different gold mines in which the company are interested, including the purchase money of 360*l.*, has amounted to 3285*l.* to 30th June, and the returns from the mines have been only 375*l.*—being the proceeds of two ingots of gold.

The directors, in their last report, stated that they had desired their manager not to continue the working of these gold mines, unless the produce covered the expenditure, or that there were strong grounds for expecting them to yield a profit within a short period. In answer to which, the manager stated that he had, for the present, discontinued working two of them; but that the Descubridora de Oro Mine was paying its expenses, and that it held out strong grounds for expecting that it would eventually pay for working on both the copper and gold lodes.

The railway, from the city of Copiapo to the port of Calders, has been commenced, but our manager thinks that it may be twelve months from the present time before it is finished. When it is opened, it will greatly facilitate our operations, in bringing down the copper ores to the port for shipment, and save a heavy expense, which is now incurred. By the last advices, our manager speaks of the improved value of the company's property, and that the shares in the different silver mines were estimated at largely increased prices by the other shareholders in them. It will be recollected, that in these shares we only hold certain barras, or shares.

In consequence of the increased value of our property, our manager recommends sending out a party of 15 to 20 young men as miners, and a further supply of iron tools and implements; and the directors intend complying with his wishes. The directors have only further to congratulate the shareholders upon the present prosperous condition of their property in Chili, and to express their continued satisfaction with the exertions of Captain Waters, and all others in their service there.

The report was adopted, and ordered to be entered upon the minutes. The thanks of the meeting were then given to the chairman and directors, for their able management of the affairs of the company, and the meeting broke up.

UNITED MEXICAN MINING ASSOCIATION.

The half-yearly meeting of proprietors, which was numerously attended, was held on Wednesday, at the offices of the company, Finsbury-circus, Moorfields.

Sir JOHN EASTHOPE, Bart., in the chair.

The notice convening the meeting having been read, and the minutes of the last meeting formally confirmed, Mr. SMITH, acting for the secretary, proceeded to read the following—

DIRECTORS' REPORT.

MINE OF RAYAS.—No particular feature has been observed in the workings of this mine, and its produce has been variable and small.

MINE OF PROMONTORIO.—The anticipation held out of the rich vein in Rayas (since worked out), running into this mine, has not been realised, and by the last accounts the general appearances were not very favourable.

MINE OF ALDANA.—The amount already expended on the trial works has exceeded the original estimates; but it is to be hoped that some good results will present themselves.

JESUS MARIA Y JOSE.—This mine, the most important of the company's property, has been worked with all practicable activity, and some favourable discoveries may be fairly expected ere long.

TRINIDAD.—This mine is situated on the vein of La Luz, and partially adjoins the Jesus Maria Mine, and from the known character of the district, the manager has concluded a contract with the owners, and the works are being pushed forward with activity.

MINA GRANDA.—This mine is situated 1200 varas east of La Luz, and a contract has also been made with the owners on favourable terms, and the necessary works for the further trials of ths vein and sinking of the shaft have commenced. The statement of the outlay of the different mines is as follows:—

January to October, 1850—Promontorio		£16,232	2	6	
,, ,,	Aldana	34,884	0	0	
,, ,,	Jesus Maria	17,464	3	1	
,, ,,	Trinidad	3,416	4	1	
,, ,,	Mina Granda	3,772	6	5	75,770 0 5
Deduct the amount received from the workings in Rayas					64,739 3 0
Balance of outlay					£11,030 5 5

ZACATECAS CLAIMS.—These claims still remain in abeyance. The manager in Mexico is using every possible effort to urge a settlement, and the directors are carefully watching to aid his efforts.

The following is a statement of the London accounts, audited from December 31, 1849, to 31st December, 1850:—

Exchequer Bills, 11,000*l.*; bills of exchange, 1200*l.*; cash at bankers, 980*l.* 8s. 8d.; stamps on hand, 144*l.* 5s.; petty cash, 54*l.* 0s. 3d.		£13,378	13 11
Interest on Exchequer, 362*l.* 19s. 11d.; money lent, 88*l.* 7s. 7d.		451	7 6
Transfer fees, 159*l.* 5s.; discount on stamps, 9*l.* 18s.		169	3 0
Remittances from Mexico—Specie, Jan. 1, 3, and April 1 (less insurance)		12,317	14 10
Bills of Exchange, due at various dates		14,625	0 0
Total		£40,941	19 3
Quicksilver shipped to the manager at Mexico, and sundry payments, in respect of which he is to account—viz.: 300 bottles	£4335 4 2		
Sundry payments	682 3 6	£5017	7 8
London expenses for one year—salaries and other disbursements		1611	2 10
First dividend, 102*l.* 15s.; second, 78*l.* 10s.; third, 136*l.* 10s.; fourth, 359*l.* 12s. 6d.; fifth, 14,840*l.* 12s. 6d.		15,518	0 0
Exchequer Bills, 17,000*l.*; cash at bankers, 1049*l.* 16s. 4d.; stamps on hand, 186*l.* 2s. 6d.; petty cash, 18*l.* 6s. 2d.		18,254	15 0
Total		£40,941	19 3

The directors regret that the state of the concern at the present time does not warrant them in recommending to the proprietors the payment of any dividend. The addition to the company's property of the two new mines of Trinidad and Mina Granda will require a considerable outlay for some time to come. Up to the last accounts received, no positive signs appeared of the new mines even paying their own expenses. The lease of Rayas expires on the 31st of December next, and there does not appear any probability of obtaining a renewal on equitable terms; and, should the new lessees undertake the necessary extensive works of investigation, it will be a considerable time before the association can receive any portion of their existing claim. Should the new mines of the company not pay their own expenses, the whole burthen of the concern must rest upon the small remaining returns derived from the haciendas, which, according to the last year's account, amounted to *£34,185*. The directors, therefore, have full confidence that the proprietors will concur in their opinion that it would not be safe, as regards the permanent interests of the concern, to make any distribution of the funds at the present moment in their hands in England.

This asset of		£18,254 15 0
Is subject to the unclaimed auxiliary capital, 1062*l.*; red scrip, 1166*l.* 5s.; first dividend, 846*l.* 15s.; second, 568*l.* 15s.; third, 624*l.* 5s.; fourth, 999*l.* 7s. 6d.; fifth, 1349*l.* 12s. 6d.		6,617 0 0
Leaves balance		£11,637 15 0

[The reserved fund, 5000*l.*, is not deducted from this sum.]

The CHAIRMAN, in moving the adoption of the report, observed, that there were no secrets in the management of their affairs; the directors had been perfectly candid and open, and every proprietor could, at any time, call and ask for such information as he required at the office, and thereby derive as much as was possessed by the directors themselves. In reference to the report, the most important subject, doubtless, was, the fact that the directors had not judged proper to declare a dividend; and it might be said, that as their funds at command amounted to upwards of 18,000*l.* in Exchequer Bills, what reason was there for not adopting that course? To this he would reply, that to make a dividend of 5s. per share would require 10,793*l.* 10s.; there were also other liabilities which their capital was chargeable with, to the amount of 6000*l.*; and if, under these circumstances, they had declared a dividend, he should consider they would be fairly chargeable with recklessness, and want of ordinary prudence. Having only recently purchased new mines—for which a large outlay might be required for supplying them with quicksilver—the proprietors might, were a dividend declared, fairly turn round upon the directors, and blame them for not seeing the necessity of keeping back funds for this purpose. It must be recollected that these mines were taken with the especial approbation of the proprietors, in the full belief that this was the best step that could be adopted. Their contract, as regards Rayas Mine, on which they had a large claim, expired in December, and hence it became prudent to see whether they could engage in any other mines, or merely work those they possessed with the utmost care. The truth was this—they had taken these mines under the guidance of experienced and prudent men, by whom every contract was made with the greatest care, and who, in one instance, from over caution, had rejected one contract which, if secured, would have turned out one of the greatest prizes in Mexico. The directors believed they were acting rightly in taking these mines, and in doing so, they took care fully to impress on the mind of the manager abroad that he must depend on his resources from the mines, and not upon England. If, by declaring a dividend, they had left themselves, as it were, without a shilling, the proprietors might justly say that the directors, knowing the exact position of their affairs, and the demands that would be made upon their resources, ought to have resisted their impatience, and refused compliance with their wishes. He should be happy to hear the sentiments of any gentleman present, and to give them any information in his power. It was, in fact, not until that very morning that they came to a decision about a dividend, for he could assure them that had any despatches arrived (and they were in daily expectation of receiving them), even though without money, but with advices that remittances would be coming, they would have been only too happy to declare a dividend; and should they receive remittances justifying such a step, they would forthwith call the proprietors together, and pay a dividend, without waiting for the next half-yearly meeting. (Cheers.)

A PROPRIETOR rose to express his disappointment that no dividend had been declared, inasmuch as it was fully understood at the last meeting in autumn that sufficient funds would be in hand for that purpose. Some heavy remittances had been received since that time; but, in reality, their money had been expended in sending over quicksilver, and while they continued to send over quicksilver, they must not expect any dividends, so that they were working the mines for the benefit of parties abroad, instead of the shareholders at home. Under such circumstances, it became a consideration whether they ought to go on in this course, or give up the mines altogether. He threw this out as a suggestion for the consideration of the meeting.

The CHAIRMAN could not help being surprised that such a suggestion should have been made, since there was nothing, in his opinion, to warrant it. If the proprietor could prove that their expenditure had been extravagant, or that they retained more money in hand than they needed, there would be some ground for it. For the reasons he had already stated, he did not think it safe that they should divide every farthing they had in this country—a course which would render them a laughing-stock to all the trading community, were they to commit so great an error.

In reply to a question from a proprietor, it was stated that upwards of 4000*l.* worth of quicksilver altogether had been sent from this country. It was stated also that the claim of the company on the Rayas Mine would be paid out of the workings of the future lessees, which were, in fact, the only security of the company for the debt, so that they had, by the mining laws of the country, a mortgage on its future produce.

A PROPRIETOR said he should be sorry to inconvenience the directors, but though a dividend of 5s, was objected to, he thought there were sufficient funds to allow of a dividend of 3s. without causing any embarrassment, especially as it appeared that a remittance was expected.

The CHAIRMAN denied that he had stated that a remittance was expected; he had merely said that if it did come, or even advices of it, the directors would feel great pleasure in dividing it among the proprietors.

In answer to an inquiry by a proprietor, the CHAIRMAN stated that their superintendent abroad had been seriously ill from fever, and found it necessary to obtain leave of absence of six months; but there was every reason to believe that he had made the most satisfactory arrangements for carrying on the operations at the mine during his absence. He might possibly come to this country for the recovery of his health, which was very desirable, as he could then afford full information to the proprietors in all matters relating to their interests.

Some discussion then took place on the "spoliation" the company had suffered from the Mexican Government, concerning which a remonstrance had been already made by Lord Palmerston; and it was hoped that the steps taken to obtain redress, if backed by the representatives of the Government, would ultimately be effectual in procuring it.

The mover of the amendment was next called to make his motion to the effect stated, when it appeared that the worthy proprietor was *non est inventus*. The amendment for declaring a dividend, however, was subsequently moved by another PROPRIETOR (Mr. Chard), and seconded by Mr. WADDILOVE.

After some further discussion, on being put to the meeting by the CHAIRMAN, only seven hands were held up for the amendment, the remainder of the meeting voting for the adoption of the report of the directors. The decision come to appeared to give general satisfaction; the CHAIRMAN again assuring the proprietors, that in the event of any arrival justifying that step, they would be called together to receive a dividend.

A vote of thanks was unanimously passed to the chairman, which terminated the proceedings.

CALLINGTON MINES COMPANY.

At a quarterly general meeting of shareholders, held at Salvador-house, on Wednesday, the 29th January,

RICHARD HODGSON, Esq., in the chair.

After the usual preliminaries, the following statement of accounts, for three months ending with September cost, was submitted:—

Balance brought from last account						£2669	5 9
July cost	£823	6	6				
Kelly Bray	43	1	5	868	7 11		
August cost	837	14	0				
Kelly Bray	78	3	3	915	17 3		
September cost	861	7	11				
Kelly Bray	30	13	0	892	0 11	2676	6 1
Interests and discounts						10	2 7
Directors' attendances						£62	10 0
Management						50	0 0
						112	10 0
Total						£5468	4 5
July returns—silver-lead ore	£754	5	5				
,, copper ore	164	2	7	918	8 0		
August returns—silver-lead ore				626	6 1		
September ditto— ,,				481	5 0	2025	19 1
26th instalment						1000	0 0
Balance carried down						2442	5 4
Total						£5468	4 5
September subsist						£32.	

The following reports were then read to the meeting:—

DIRECTORS' REPORT.

Agreeable to the rules, the directors have called you together to submit the statemen of the accounts for the three months ending with Sept., the particulars of which are already in your hands. Since the last quarterly meeting, the directors have changed the managing agent, and have appointed Capt. Wm. Lean to that office. The directors feel some pleasure in stating, that the mines are now being prosecuted with considerable vigour, and indicating much more favourable prospects, both on the lead lode and on the Kelly Bray copper lode. The directors have to report that Mr. Tyrie has resigned his seat in the direction, and that Mr. Samuel Betteley, holding a very large interest, has been appointed in his stead. The report of Mr. Johnson, and also of Captain Lean, will be read to you.

MR. P. N. JOHNSON'S REPORT.

London, Jan. 29.—At your last annual meeting, in March, I proposed such operations at your mines as I considered were likely to bring them into an efficient state of working, by sinking the diagonal shaft and continuing the 112 fathom level, for communicating the north with the south mine, by which a considerable part of the duty of the north engine would be relieved, as well as throwing open an extent of ore ground which could not be worked to advantage without this communication: these operations have gone on steadily and prosperously—the diagonal shaft is down to the 125, and the 112 fm. level will be communicated in a few weeks, and at a less expense (above the returns) than what I then estimated. I also pointed out the expense and probable advantage of sinking the shaft at Kelly Bray, which was ordered to be done; and I have no doubt the expense of developing this part of your property will be within my estimate, and am truly happy to say that the prospects, and ore now breaking, prove that we were perfectly justified in the outlay. My object has been to confine the operations on all points so as to meet the cost within the estimate, at the same time to confine the tutwork to such parts as would render the ore ground, otherwise not capable of working, to be taken away to advantage; and I estimate that from 70 to 80 fathoms more of good ore ground will thus be available than has been taken away in the same period of time. My best attention has also been given to the most economical and efficient method of dressing the various class ores risen. I cannot but congratulate you upon the appointment of Capt. Lean as chief agent, as you will not only have the advantage of his superior skill as a practical lead and copper miner, but his having the management of the adjoining mine of Holmbush will give greater facilities and information by comparison in the development of the Callington Mines. I am also much gratified to find that his opinion on various parts of the mineral property perfectly coincide with my own; and I trust that some trials proposed to be made by us in the coming season are likely to be attended with success, at a very trifling expense. In conclusion, I beg to say I consider the Callington Mines in a much better state of working, considerably more ore ground opened, and the prospects of their becoming profitable, much greater than at your last general meeting in March.

MINE CAPTAIN'S REPORT.

Jan. 28.—The lode in the 125 fm. level north is 15 in. wide, producing 3 cwts. of lead per fm.; the lode in the south end is 12 in. wide, composed of soft spar, prian, and stones of lead, laying open tribute ground. The diagonal shaft is sunk about 9 feet below this level, and is, for the present, suspended, whilst sundry necessary work is being performed, previous to sinking a lift of pumps, instead of barrels. The lode in the 112 fm. level south is 10 in. wide, producing saving work, and opening ground that will set at a moderate tribute, and daily improving as the end approaches the 112 fm. level north, from the south engine-shaft, when the lode will produce 7 cwts. of lead per fm.; we are pushing on those levels as fast as possible to effect a communication, and afterwards divide the water, by sending back a portion of it from the 50 to the 60-inch engine (equal to two strokes per minute). The ground in the counting-house shaft is very favourable, and we expect to hole to the 112 fm. level—the last above mentioned—within a fortnight from the present time; and in order to expedite its accomplishment, we have set a pitch in the back of the level to six men, at 5s. 6d. in *l.*, on the value of the lead, limited from the centre of the shaft so far north and south; we have a twofold object for so doing—first, to ventilate this part of the mine, and afterwards to sink another lift to the 125 fm. level, to lay open tribute ground so much faster; and secondly, to raise lead, to assist in carrying out several new operations, both on the lead and copper lodes, contracted for at our last setting-day (particulars of which will follow). We have extended the 50 fm. level cross-cut north from Kelly Bray shaft about 2 fms., in which we have intersected several veins (or droppers), all of them underlying north, and producing strong yellow copper ore: such kindly indications bespeak a lode to the head of us, and into which they will form a junction, and at that point most favourable results may be looked for (or reasonably expected), especially so if we may judge from the appearance of the lodes below. The Kelly Bray lode, in the rise above the 70 fm. level, is 6 feet wide, composed of mundic, beautiful quartz, and yellow copper ore, producing 8 tons of the latter per fm.; the top of the rise is 3½ fms. above the back of the level. The lode for the last 30 fms. driving will set at a moderate tribute, when the shaft is made available, by holing to this level, to draw away the stuff and to ventilate it, and afterwards to sink the same to deeper levels, and to extend them east into the granite, and west to the great cross-course, in which position (I believe) all the copper lodes will be found the most productive; and when we take into account that there exists five east and west lodes in the sett, and all of them intersected at a depth of 125 fms. below the adit level, by the lead course, on which the workings have been very partial indeed, and I may say that five such promising lodes are rarely to be seen in one mine, and which, if fully explored, will produce a great quantity of mineral, and, I fully believe, will ultimately leave a fair profit to the shareholders for the money advanced. We have selected and set the following additional bargains to those previously wrought (not forgetting that others are in contemplation to be carried out in due time)—viz.: The 125 fm. level, north from the south mine, is to be driven by six men, under the most productive part of the lead lode in the mine (at present 112), and to lay open a communication with the counting-house shaft, whereby a productive piece of ground will be made available. The 112 and 125 fathom levels, east of the lead course, on Johnson's lode, by six men in each level, and if this lode does not prove a productive one (especially to the east of the great cross-course), I should almost hesitate to give an opinion of a lode hereafter; also, the 112 fm. level, north of north mine, by four men; seeing the end will almost pay for driving, and two tribute pitches, which are wrought close by the end, at 6s. 8d. and 8s. 6d. in *l.*, on the value of the lead. A cross-cut has also been set to drive north, by four men, in the 90 fm. level, about 4 fms. east of the cross-course; the object here is to prove if there be another part in that direction. The blasting of the first few holes discovered a branch 3 in. wide, dipping north, 3½ feet in a vein, composed of mundic, spar, and yellow copper ore, evidently dropping from, or into, a lode, or part of such, which a few fathoms exploration will satisfy; and whilst the above work is being carried out, you may rely that the most strennous exertions shall be made to reach the various objects as early as possible, and in the interim all the mineral that can be fairly raised shall be, both of lead and copper, towards meeting the cost, until the numerous lodes are fully developed, the results of which I do not fear.—WM. LEAN.

HOLYFORD COPPER MINING ASSOCIATION.

At the general half-yearly meeting of shareholders, held at the offices, Great Winchester-street, on Wednesday, the 29th Jan.,

CHARLES HUNT, Esq., in the chair,

The following directors' report was read:—

The directors submitted an account of receipts and payments for the half-year ending 30th Nov. last, which had already been circulated; also a statement of monthly mine costs and produce during the past half-year; and a comparative statement of same details for the years 1849 and 1850.

[The monthly statement of mine costs and produce showed a balance of 1412*l.* 7s. 3d. in the last six months in favour of the mine.]

From the accounts, it will be seen that there has been, in 1850, an increase of 139 tons in the ore raised, and 1829*l.* 4s. 2d. in the proceeds; also, a decrease in the expenses of 963*l.* 9s. 7d., as compared with the corresponding items for 1849. A statement of liabilities and assets is not given, but it may be mentioned that the liabilities consist only of 232*l.* 1s. 2d. due to merchants for supplies, while the value of materials in stock, with

the cash and bills in hand, is 360*l.* 5s. 1d. This is exclusive of the steam-engine, machinery, and other property on the mine, which is valued, as working stock, at 2115*l.* 14s. 1d., besides the various buildings. And there is also in hand a quantity of inferior ores, estimated to produce about 1200*l.*, but which cannot be prepared for sale without stamps. The expense of erecting them, with the requisite machinery, would be greater than it is thought advisable at present to incur, and this ore is, consequently, not immediately available.

The subjoined report of the captain of the mines will afford particulars of the workings during the past six months, with their present position. As regards future prospects, the directors are unwilling to venture any decided opinion. From the very varying and uncertain extent of the bunches of ore which have been opened, they consider that no satisfactory or reliable conclusion can be safely drawn from the results of the workings to the present time. The prospects, however, may be deemed promising, as the bunch of ore between the 30 and 40 fm. levels, which has produced a large portion of the quantity raised in 1850, continues under the 40 fm. level as far as the engine-shaft has yet been sunk. There are also several good bunches in sight in these levels, and the ore is as rich as it was found nearer the surface. And with the present reduced expenditure, the produce of 1851, if equal to that of 1850, will leave a fair balance at the disposal of the shareholders.

Jan. 24.—The 10 fm. level south has been driven 9 fms. 2 ft. 9 in., 6 fms. of which has been driven through a lode worth 40*l.* per fm. The 20 fm. level north has been driven 3 fms. 0 ft. 8 in., the lode for that distance small; the end is now in elvan. The 30 fm. level north has been driven 1 fm., lode small, also in elvan. The 30 fm. level south has been driven 17 fms. 2 ft. 1 in.; the end is now in blue killas, lode 6 in. wide, worth 20*l.* per fm.; the lode in the back of this level, for 20 fms. in length, is worth 60*l.* per fm. The 40 fathom level north has been driven 5 fms. 5 ft. 4 in., the end is now in capel and killas; the lode is 1½ ft. wide, with good stones of ore; the lode in the back of this level, for 3 fms., is worth 30*l.* per fm. The 40 fm. level south has been driven 12 fms. 2 ft. 9 in., the end is now in white killas, lode 8 in. wide, worth 20*l.* per fm. The engine-shaft has been sunk under the 30 fm. level 2 fms. 1 ft. 6 in., and holed to the 40 fm. level; the shaft is now down 9 ft. under the 40 fm. level, lode 1½ ft. wide, worth 30*l.* per fm. The whim-shaft has been sunk under the 30 fathom level 7 fms. 0 ft. 6 in., and holed to the 40 fm. level; the lode between the engine and whim-shafts is all taken away, and the shaft securely timbered. The second shaft has been sunk 14 fms. 3 ft. 4 in. in the country, and holed to the 10 fm. level. The shaft under Allis's has been sunk 3 fms. 5 ft. 6 in. in the country, and holed to the 17 fathom level. We are this month stoping a piece of ground in the 13 fm. level; the lode is 15 in. wide, with good stones of ore. The 17 fm. level, under Allis's, has been driven 1 fm. 5 ft.; the end is now in elvan, without any lode. A winze has been sunk under the 30 fm. level 2 fm. 3 ft., lode 2½ ft. wide, worth 20*l.* per fm. A winze has been sunk under the 20 fm. level, south of engine-shaft, and holed to the 30 fm. level 8 fms. 2 ft.; for 4 fms. of that depth, the lode is worth 60*l.* per fm. We have a pitch now working in the back of the 20 fm. level north, about 6 fms. behind the end, worth 40*l.* per fathom. We have a pitch in the back of the 10 fm. level, worth 40*l.* per fm. A pitch in the back of the 20 fm. level, south of engine-shaft, worth 60*l.* per fm. A pitch in the bottom of the 10 fm. level, south of engine-shaft, worth 40*l.* per fathom. Other pitches are poor. We have six men now working in the back part of the 30 fm. level south. After holing the second shaft to the 20 fm. level, which we hope to do in a few days, we shall set on six men more in the back of this level; also, six men in the back of the 40 fathom level north. We cannot set on any more at the present time, on account of the whim not being able to keep the stuff. I would advise sinking the first shaft under the 20 fm. level, in order to communicate with the 30 fm. level, south of engine-shaft, while we have water to do so. I would also advise a cross-cut to be driven east in the 8 fm. level, north of engine-shaft, as we have driven so many fathoms without any lode. I find by dialling this and the adit level, the lode to be about 8 fms. east of the 8 fm. level—suppose to cross-cut 20 fms. north of engine-shaft. At Old Forge, nothing has been done since last report.—JOHN PASCOE.

The term of office of the directors and auditors expired at the present meeting, but they were re-eligible; and, with the exception of Mr. F. Le Mesurier, who retires from office as director, offered themselves for election accordingly.

The report of the directors was received and adopted, and Messrs. Charles Hunt, Edward Henley, and William Henry La Serre (in the place of Mr. F. Le Mesurier) elected directors, and Messrs Arthur Hunt and William Broch auditors for the ensuing year.

TYN-Y-WORGLOD SLATE QUARRY COMPANY.

A general meeting of shareholders was held at the offices of the company, 52 Threadneedle-street, on Monday, January 27,

FRANCIS SMITH, Esq., in the chair.

The meeting was called to receive the first annual report of the committee of management, and for the transaction of other business. The report was read by Mr. Arthur R. Briggs, and contained a full statement of the past and present position of the company. It appeared from this report that some difficulties had arisen, from want of capital and other circumstances, in carrying out the objects of the company, and in completing the purchase of the property. In August last, however, some of the proprietors were prevailed upon to visit the locality, in company with gentlemen qualified to judge of the real merits of the undertaking. A report on the plan of the works necessary for opening of the slate quarry was subsequently made by Mr. St. Pierre Foley, whose favourable judgment was corroborated by the opinion of Mr. Evan Hopkins; and the result was that the proprietors referred to opened a negotiation with the owner of the quarry property, to whom a balance was then due of 2800*l.* This negotiation resulted in an abatement by him of 1300*l.*, and 1500*l.* was advanced to the company by the gentlemen in question, on security of the property, thus completing the purchase. In addition, out of the 970 shares unissued, 750 were subscribed for by these gentlemen, and the first call of 1*l.* 6s. 8d. per share at once paid up, by means of which the outstanding debts of the company were liquidated, and funds provided for future operations. Contracts were forthwith entered into, and the works are now proceeding with every practicable rapidity. The present available resources of the company amount to about 3500*l.*, including balance in hand, and 2000*l.* to be received as called up from the proprietors of the 750 shares above mentioned, and 220 shares unissued. This sum, it is presumed, will be sufficient to meet all contingencies at present contemplated in the estimate of the engineer. A purser has been appointed, and two gentlemen have agreed to undertake periodical visits to the works, with a view to impart confidence in carrying out the operations of the company. So far as they have proceeded, every expectation held out by the engineer has been realised, and the vein of pure slate still existing in the quarry opened when purchased by the company, has been already met with in the new works, and is being rapidly opened. The managers, in conclusion, congratulate the proprietors on the satisfactory condition into which the company has been brought, and express a confident hope of being able, at an early period, to realise a substantial return for all the anxieties incidental to the early stages of all similar undertakings.

After the reading of the report, of which the above is an abstract, the following report, by Mr. St. Pierre Foley, was read to the meeting:—

It is with satisfaction that I find myself, upon addressing to you my general report for the year now elapsed, enabled to approach the subject of the operations of the company freed from all embarrassment as to the adequate supply of funds for the proper opening of the works, and, consequently, am permitted to address myself to the future operations I have proposed, with confidence that the results I anticipate may now be fully relied on.

During the past year, the position of the company did not permit of the outlay required for extensive new openings, and my attention was necessarily limited to clearing portions of the old works, and repairs of ways and works; and even these operations were suspended before enough had been done to permit much slate making to be proceeded with.

In the autumn, having received directions to prepare plans and estimates, consonant with the full development of the capabilities of the property, I proceeded to the spot, and associated with me upon the occasion Mr. Evan Hopkins, in order that my views and plans might be fortified by the opinion of that gentleman. The result was the submission by me of a report to the managers, which was afterwards very fully discussed by the gentlemen who thereafter joined the company. It gives me great satisfaction to find that my report was received with favour, and adopted.

I proceeded, in December last, to prepare the necessary plans for setting out the works, and at the end of the third week of that month I let contracts for opening out the new floor, upon very favourable terms. Everything as yet done confirms fully the existence, in the quantities and to the extent I have always reported, of the slate vein furnishing the superior quality so much sought for in the market.

I am anxious, in reporting of the probable progress to be made from time to time, to state my opinion with as much accuracy as I can, and without exaggerating what may be expected. I state, therefore, that after the lapse of three months I expect sufficient progress will be made in the new works, and the clearing of the old works may be advanced sufficiently to permit slate making to commence with a sufficient number of hands to cover all the general expenses of the company; and that by the close of the year the works will be completed so far as to allow 100 men to be employed at slate making. From this period, the works will proceed so as to permit of a rapid increase in this number, until the period shall have arrived when room will be supplied for the full number required to produce the large returns I have reported as capable of being realized.

As you have desired me to report minutely with reference to the stages of progress which may be anticipated from time to time, I say that within three months slate making may be commenced, so as to cover fully all the general expenses of the company; at the expiration of six months, I expect we may employ an average number of 50 men at slate making; and by the end of the year 100 men, capable of the steady increase in numbers I have before alluded to.

In order to permit a fuller understanding as to these details, I may offer the following short statement in relation to the works intended, and the results to which I look forward. The proposed works for the extension of the necessary openings to slate making may be understood by a reference to the sections accompanying this report. These, when completed, will exhibit four distinct floors, the lowermost about 100 feet under the intended and now opening new floor, which will admit of at least 40 men in breast at quarrying for slate making on the deepest parts of the quarries. Over this floor, the second floor, about 13 yards above the range of the first or lowermost, will admit of about from 15 to 20 men at full work on the west range. On the third floor, 10 yards still higher, and on the range of the old quarries now clearing, about an equal number of men (from 15 to 20) will have room, but on the sizes chiefly of from ladies to best doubles, till this floor is sunk to the present range of the second floor, where the largest size slates will be producible. But the great (new) floor will easily admit of from 50 to 90 or 100 men at full work, independent of those just described; and thus the whole breasts of the vein now opened, and the old works fully cleared, it is plain that 100 men is a very limited number to that which may really be employed.

Every person conversant with works such as the Tyn-y-Worglod slate making, knows from long experience that a well-managed quarry, on a good vein of slate, such as the present very superior one, produces a profit annually per slate maker of from 50*l.* to 80*l.*, and the latter sum more generally on the fine slates, and this clear of all wages, materials, royalty, &c., all being deducted in this calculation. Therefore 100 slate makers will give to the proprietors a clear profit of from 5000*l.* to 8000*l.* per annum; and the very second year from this period may be set down as making this profit, even as a minimum rate per man, as that year will admit of a progressively increased number of slate makers; and thus at the commencement of the third year the annual profit will begin, it is most confidently expected by me, to produce from 10,000*l.* to 12,000*l.* or 15,000*l.* a year—the works, of course, going on uniformly.

The statement of accounts showed—Amount received on shares, 13,120*l.*; on mortgage, 1500*l.*; sale of slates, 340*l.* 3s. 2d.; calls to be made on 750 shares, 2000*l.*; unassigned shares, 880*l.*; value of slate in stock, 2321.—18,072*l.* 2s. 3d. —By cash paid for purchase of quarry works, &c., 12,700*l.*; labour cost, materials, &c., 1105*l.* 5s. 3d.; salaries, rent, and other disbursements, 419*l.* 9s. 3d; royalty, 52*l.* 11s. 8d.; law charges, 294*l.* 2s. 3d.—14,571*l.* 8s. 5d.: leaving a balance of 3500*l.* 13s. 10d., made up of cash at bankers, calls to be made, stock, and unassigned shares, as stated.

Mr. A. R. BRIGGS, in moving the adoption of the reports, congratulated the meeting on the present satisfactory position of their affairs, and thought that every proprietor had a right to be pleased at the statement laid before them. Their past difficulties arose from a want of funds, which had reduced them to a helpless state. All these difficulties, however, were removed; and the reason was because the undertaking had stood the test of a critical examination, and was really a good thing: a full investigation had been made, and the result was that the concern was found substantially good. There was now money to prosecute it with the requisite energy, and they could at length call the property their own, with a liability of only 1500*l.* mortgage. He fully believed that, with the exercise of a little patience, they would soon be enabled to realise returns; for he had himself no doubt whatever of the value of the speculation. He was greatly pleased with the report made by Mr. Foley, corroborated as it was by the views of Mr. Evan Hopkins; and with respect to the wealth and value of the quarry, he entertained no doubt that their anticipations would be fully realised. The only question was, what would it cost them? They had now 350*l.* in hand, and he was perfectly satisfied that before 2000*l.* of that sum was expended, a considerable return would be made; so that he did not believe another shilling would be wanted, inasmuch as before their present capital was exhausted they would be getting their money back. He would now move that the reports be adopted.—Mr. R. SIMS seconded the motion, which was carried.

Mr. ST. PIERRE FOLEY went into some details as to the present state of the quarry, which, when he first saw it, was in unquestionably a rude state. No small skill and energy were at first required to make it valuable, for if the vein of slate was not good, no profit could be made. But now, when they had opened a vein of pure slate, all difficulties were removed. There were regular steps and galleries in the quarry; the great floor was 83 ft. in length, with a proportionate breadth, opening upon the best slate; and at present they were cutting 50 feet into the mountain; these floors were exclusive of the old works, and they might be said to have four quarries, in fact. There were also four tramways, so that the men could carry on their operations without interfering with one another. The works would now go on steadily and progressively, and were capable of employing a great number of men for a number of years. If he had felt anxiety before, in the early stage of the speculation, he felt doubly anxious now. His report, however was before the public, and he was glad to have it corroborated by Mr. Evan Hopkins, both as regards the quality of the slate and its great abundance. He had no hesitation in stating his belief that in 12 months, if the works went on steadily, their profits would be from 5000*l.* to 8000*l.* a year.—This announcement was received with evident marks of satisfaction by the meeting.

Mr. BRIGGS said, the next topic for decision was the future board of management—a rather difficult subject. He believed that the gentlemen whose resources had been employed on behalf of the company, and who had found capital to complete the purchase of the quarry, held shares to the number of 2500. They did not on that account desire to dictate to the meeting; yet, having so large an interest, they expected a proportionate share in the management. It was necessary that five proprietors should be in the direction. He would propose their present chairman, Mr. Francis Smith (banker, of Hastings); some of his friends thought that he (Mr. Briggs) should be another; he would include also Mr. Clement and Mr. G. Wythes (Reigate), whose wealth and respectability would, he thought, give stability to the company. In addition to the four gentlemen named, it was necessary likewise to have a proprietor in the direction whose business brought him regularly in the city, and who would thus be enabled to overlook the concern. It appeared that Mr. Thomas Smith was the only gentleman there who combined the facilities he referred to, and he should, therefore, be glad to include him in the management.

The names of the four proprietors above given were then formally put, and they were unanimously chosen.

On Mr. Briggs being proposed as one of the management, Mr. THOMAS SMITH said it would not be deemed indecorous, perhaps, for him to state that the shareholders were highly indebted to the zeal and energy of that gentleman, and the talent he had brought to bear upon the undertaking, which had been found very valuable, and for which he felt that a public acknowledgment was due to him.

The Rev. Mr. JOHNS, one of the former management, here said he thought it quite necessary that they should have a manager in London who was able to devote himself more than he could to the interests of the company; and as he had not sufficient time for that purpose, he begged to tender his resignation.

Mr. SIMS then proposed Mr. Thomas Smith, as a gentleman whom he had long known, who had taken an early interest in the undertaking, and who was in every way fit to undertake the duties and responsibilities of a director of the company.

The motion was carried, as was also one of thanks to the Rev. Mr. Johns, for his past services in the management.

Mr. BRIGGS then moved a vote of thanks to Mr. St. Pierre Foley, for the zeal and ability he had displayed in promoting the interests of the company, which had been under great obligations to him. Their financial condition was at first very undefined, and under the circumstances that gentleman had rendered his services gratuitously for the past year, charging only for the expenses he had actually incurred. As regards the officers of the company, their remuneration would not make much inroad upon their resources, as it was intended that the reward of their engineer and purser should be in proportion to the profits of the company, so that they had a direct interest in promoting its prosperity to the utmost of their power.

The motion was seconded, in very complimentary terms, by the Rev. Mr. Johns, and knowledged by Mr. St. Pierre Foley, who expressed his hope that he should be able by his acts to show his sense of their good opinion, and the compliment paid him.

Thanks were then voted to the chairman, and the meeting terminated.

WHEAL MAY MINING COMPANY.

A general meeting of adventurers was held at the Hall of Commerce, Threadneedle-street, on Thursday, the 30th January, and was numerously attended.

Mr. J. LUNTLEY in the chair.

The notice of meeting, and proceedings of the last general meeting, having been read, Mr. PEET (the secretary) proceeded to give a detailed account of the position of the company's affairs. The committee had not prepared a report, as the workings on the mine had been necessarily limited whilst the new engine was in course of erection. The balance-sheets he had laid before the meeting exhibited a favourable improvement in the company's affairs; for at last meeting, liabilities of 130*l.* 8s. 8d. existed, with cash in hand of 4*l.* 14s. 4d. The statement of accounts now showed, as received on calls since last meeting, 131*l.*; arrears due, 273*l.* 15s.; mine cost-sheets, November, 35*l.* 13s. 6d.; Dec., 30*l.* 13s.—of which, with former liabilities, 97*l.* 18s. 8d., had been paid: leaving, to Jan. 30, the sum owing of 98*l.* 16s. 6d.—Under the head of assets were —Arrears of calls on shares registered, 74*l.* 15s.; and from 398 unregistered shares the total sum of 199*l.*; cash in banker's hands, 37*l.* 5s. 2d. = 311*l.* 0s. 2d.: leaving, when the liabilities are discharged, a balance in favour of the mine of 212*l.* 3s. 8d. The sum of 25*l.* 10s. was paid at the meeting in respect of calls on registered shares; and resolutions were passed, from which it will be seen that an important step has been taken for completing the registration of the shares. Considerable interest seemed to be felt by all present in the proceedings, and a desire shown to co-operate for the working of the mine in a spirited manner. The following resolutions were passed:—

That the balance-sheet and accounts produced, showing assets, in favour of the mine, of 212*l.* 3s. 8d., be considered as highly satisfactory, and passed accordingly.—That Mr. Boxall and Mr. George Emery be appointed auditors for examining the accounts, previous to being entered in the cost-book.—That this meeting do hereby authorise the secretary of the company to receive from any holder of certificates, originally issued by the Wheal May Mining Company, and not already included in the 626 1024ths, represented in the new cost-book, by signatures or transfers to this date, as and for both calls and new shares, according to the present arrangement, in the proportion of 7 certificates for 2 new shares, including calls paid up to the present time, providing that such new registration be effected on or before the 14th day of February next.—That a special general meeting be called for the 20th February next.—That the thanks of the meeting be given to the chairman and to the managing committee for their services.

It was stated by the SECRETARY, that previous to the new cost-book being adopted, the issue of certificates had been 1500 for the lease of the sett, and 1078 sold, upon which a sum of 449*l.* 7s. 6d. had been realised to Sept. 27, 1849. The expenditure to that period amounted to 404*l.* 10s. 6d.; and the balance of 44*l.* 17s. was carried to the new account of the company, as shown in the balance-sheets at the last meeting.

The meeting separated, highly satisfied with the proceedings of the day.

CAMERON'S COALBROOK STEAM COAL AND SWANSEA AND LOUGHOR RAILWAY COMPANY.

The ordinary half-yearly meeting of this company was held on Thursday at the offices, Moorgate-street,

E. G. WINTHROP, Esq., in the chair.

The CHAIRMAN, previous to calling upon the secretary (Mr. A. C. Howden) to read the report, observed that the meeting was called solely for the shareholders to receive the report of the directors relative to the railway, connecting the company's property with the port of Swansea. Strictly speaking, the business ought to be limited to that; but if any shareholder wished to make any inquiries, or receive further information on the affairs of the company, there would be a private meeting after the present had terminated, at which every explanation in their power to give would be afforded.

The SECRETARY then read the following—

DIRECTORS' REPORT.

The directors meet the shareholders on the present occasion, being the ordinary half-yearly meeting, appointed under the provisions of 9 and 10 Vic., cap. 401, and relative Acts, having reference to the company's railway, and which the company are thereby authorised to construct, connecting the company's property with the port of Swansea. The directors are satisfied that the improved condition of business and trade in the South Wales district, in the proximity of which the company's property is situated, by the works in the float, now rapidly being made at Swansea, and the Swansea Dock Extension Act of 1850, fully warranted them to take the required preliminary measures before the meeting of Parliament, for obtaining an extension of time, within which the company may construct their parliamentary line, the powers and privileges of which would otherwise expire in August next; they, therefore, resolved to take such preliminary measures, and these have been duly effected. This course they now feel they were justified in adopting, for the additional reason, since come to their knowledge that the South Wales Railway Company have now determined to proceed with the construction of that part of their important line, already partly made, westward of Swansea. The opening of this line will confer great advantages to this company, for by the construction of about a mile of line (which they have power to do under their special Act referred to), the company will acquire ready daily transit to the port of Swansea—an advantage originally contemplated to be obtained by the company, and which must also enhance the value of the company's property. The directors, therefore, have no hesitation in recommending that the proposed bill should be prosecuted in the ensuing session of Parliament, copies of which are now presented to the meeting.

The CHAIRMAN said their business would be very brief. He thought that great advantage would result from the completion of the proposed line of railway to Swansea; and after the labour bestowed, and the money that had been expended on the project, he could not imagine that any shareholder would be found to dissent from the course laid down by the directors, especially as they only went to Parliament for an extension of the time within which the line might be completed. The value of their property would be greatly increased by the plan they had in view; and when the mile of railway alluded to in the report was completed, there was no doubt that the South Wales Railway Company would be glad to give them a handsome sum for what they had done. It was desirable also for many reasons that the name of the company should be changed. All their difficulties arose from the want of money, for at the present time they had parties of affluence ready to treat with them for large purchases of coal, but whos coffers could not be entertained, on account of their not being yet able to obtain the money due on calls. He would simply ask the shareholders to come to the office and inquire; and, when they had made themselves acquainted with the nature of the case, he was sure they would not hesitate to lend their assistance. He concluded by moving the adoption of the report, which, on being seconded by Mr. Hughes, was unanimously carried.

A SHAREHOLDER wished to know the reason of their line not being yet completed, and in operation. When he was in Wales, about five months since, the line was in progress, and it did not appear that more than a month would be required to complete it.

The CHAIRMAN said it was a matter of money only: the line was finished, and ready to receive the rails, which now remained to be purchased, but for which money was required.

In reply to other questions, the SECRETARY said that about 1000*l.* was the sum they immediately required, and there was now between 3000*l.* and 4000*l.* deficient on the calls made. The meeting would be gratified to hear that various parties had written to them, expressing their readiness to purchase largely of their coals; and in one case they could have sold coals to the extent of 700 tons per month, and at Liverpool there were parties ready to take all the coals they could raise. In fact, every arrangement had been made on the line for the reception of the rails, and the directors had worked laboriously in the removal of every obstacle; but it was needful that money should be raised, in order that the rails might be purchased, and the line set in motion. The secretary further observed that 60,000 tons was the minimum quantity they expected to raise, which would yield a profit of from 4000*l.* to 5000*l.* a year; and according to their lease, if 40,000 tons were raised, they would be entitled to receive back from their landlord the overplus of royalties paid in previous years; and if they raised 60,000 tons they would receive a drawback which would be equivalent to 1000*l.* a year.

In answer to a question put by a shareholder, whether the money they required might not be raised on mortgage, the CHAIRMAN remarked that there was no objection to that course, if the shareholder knew of any party ready to make the advance. He was satisfied that if the shareholders generally would coalesce in furtherance of their interest, they would be out of their difficulties in a twelvemonth.—No other resolution being proposed, the business of the meeting then terminated.

WEST CUBITT.—A meeting of the adventurers in this mine, which comprises the whole of the north part of the town of Redruth, being the lands of Edward Collins, Esq., and a portion of the lands of the Messrs. Williams, the hon. Mrs. Agar, Messrs. Kent and Tremayne, and others, was held at Andrew's Hotel, Redruth, on Monday last, the 27th inst., at which it was resolved to work this almost untried ground, under a committee of management consisting of Mr. Francis Pryor, Mr. John Little, Mr. Edwin Cock, Mr. J. S. Bickford, and Mr. Thomas Garland. The mine was divided into 256 shares. A call of 1*l.* per share was made. Capt. James Evans, jun., of North Pool Mine, was appointed manager, and Mr. T. R. Hearle, of Redruth, purser.

WEST PAR CONSOLS TIN AND COPPER MINE.—At the two-monthly general meeting of adventurers, it was announced that an extensive additional grant of land had been obtained from Col. Carlyon, the sett now extending as far as the St. Austell and Lostwithiel turnpike road southward, and to the east as far as St. Blazey-gate. The value of the grant is stated to be very considerable, all the lodes of Par Consols, and some of East Crinnis and Pembroke, running through the ground, and are intersected by the cross-course, upon which such large quantities of ore have been raised by the great mines in the district.

Capt. JAMES OPIE has been appointed, *pro tem.*, to the agency of Lamheroose Wheal Maria, in the place of the late Capt. Tabb.

GREAT WHEAL ALFRED.—On Monday last, the first stone of a new engine-house on this mine was laid by Master Field, eldest son of Mr. Thomas Field, who holds a large interest in this and other mines, and Master G. Nicholls, son of one of the lords. In the evening a grand display of fireworks took place, with bonfires and much rejoicing.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

BRONFLOYDD.—The adit level driving eastward is not so productive of ore as it has been for some fathoms. The eastern level yields a good deal of ore in solid strings throughout the end. The new shaft is sinking on a lode, with good strings of copper and lead in it, and the tributers working in the old mine are breaking a good deal of solid lead. I hope we shall get our crusher and flooring to work early in the spring—the order for all the necessary apparatus being in a forward condition, and we have a good quantity of ore stuff waiting for it.

GELLIR-HEIRIN.—The adit is in a lode spotted with ore, and is now getting more watery or damp, apparently from approaching the old workings above.

CAE-GYNON.—The adit level driving west is in a lode of good silver-lead, yielding from 12*l.* to 15*l.* worth per fm. The machinery is delivered upon the mine, and we have several tons ready for crushing. The mines in the vale of the Rheidol seem improving; it is very encouraging to see that those now commencing are capable of profit, and no doubt others will follow.

BWLCH CONSOLS.—The 45 (the bottom level) west is in a very orey lode, as are the stopes over. The 35 west is worth about 20*l.* per fm., and the ore bargains above it yield well.

ALLT-Y-CRIB.—We sampled 30 tons this month, which will leave a profit of about 160*l.* The ore in the end westward continues, and is worth about 40*l.* to the fm. The stopes are also very good.

CWM SEBON.—The ore ground looks very well in the 40 fm. level eastward. We have had the water in, from the recent floods, but shall not in future be troubled with this hinderance, as we are altering the shaft-work. I have no doubt, in the course of a month or so of being able to make very handsome profits.—*Goginan, Jan.* 30.

ASHBURTON MINING DISTRICT.—The tidings that West Beam Tin and Copper Mines have been purchased, and about to be immediately worked with energy by a wealthy London company, has diffused general satisfaction throughout the district. Many local parties have taken shares, and others, from their great confidence in the value of the mine, are anxious to become shareholders. Many applications from time to time have been made to the landholder for the sett, and it is understood that it is only the high respectability and wealth of the gentlemen who now have her that induced him to grant. A party of local adventurers has been formed, for the purpose of re-opening and working Silver Brook Mine. She has been idle for nearly a hundred years; circumstances of a peculiar nature are stated to have induced her adventurer to cease working, and that at a time when he was raising lead ore from her. Hitherto she has only been worked at the sole cost of this single individual. The Whidden Mines are not at present working. It is very much to be regretted that so little is doing in a district like this, which has so many very promising mineral setts in it; there is scarcely a mine in this locality proved below the adit levels.

LYDFORD, Jan. 27.—Mining here is looking brisk. In Wheal Mary Emma there is a fine bunch of tin in the stope, leaving a good bunch of tin going down—the general opinion is, that in all probability she will make a good mine. One of the stones of tin from the bunch is intended for the Exhibition of 1851. In Wheal Mary Ann the lode is looking very well, and is expected to make a good mine. Wheal Calmadey is to be set to work by a spirited company, and from the different lodes in the sett, and the congenial stratum for minerals about it, rich lodes may be expected. Wheal Mary gives every encouragement, and ought not to have been let lay idle; it appeared to be a little want of skill in the former management. Buying materials which never could come into use was another cause of crushing the shareholders, and stopping the workings. The mine is now going to work by a spirited company, who will have the benefit of what has been already done, and their operations, when properly carried out, I have no doubt, will have a good result.

CRANE AND BEJAWSA MINES.—The adventurers have prosecuted the works with unusual vigour ever since their commencement in June, 1850. No reasonable expense has been spared at the surface, to make every convenience for carrying on a mine which is calculated by the proprietors to be permanently good. An excellent account-house, smithy, material-house, engine-house, &c., have been erected, and the engine was set to work about three weeks ago. The water is drained to the depth of 15 fms., where there is a *level*, and very high expectations are formed of the results of a little further explorations, from the fact that at that level they came to a shoal of very fine *eels*, 1½ ft. long. The mine was last worked about 40 years ago, and it has been conjectured by some naturalists of the locality, that these fish must have been there a long time, fattening by the congenial properties of the mineral water—a sure indication that metallic wealth is close at hand.

POLGEAR AND LANCARROW MINES.—The sett in which these mines are comprised is situate in the parish of Wendron, in a rich mineral district, extending upwards of a mile on the course of the lodes, being 800 fathoms in breadth. They are immediately adjacent to North and South Basset, South Wheal Frances, Tincroft, Carn Brea, and other highly valuable mines. Seven lodes have been discovered in the sett, several producing tin of excellent quality, and known to be a continuation of those in the rich mines of Trethellan, Tresavean, Comfort, Carvannal, &c., and the cross-courses, so productive in Carn Brea, Tincroft, and Cook's Kitchen, pass through the sett. There is already an efficient engine and machinery on the mine; and, from a report by Captain William Martin, it appears that the engine-shaft is down 15 fms.; a 14 fm. level driven driven 7 fms. west, where the lode is from 1½ to 3 ft. wide, with

good tin, and in many parts rich bunches. Eastward the lode is also similarly productive, and in the 8 fm. level the ground is rich for tin. There appears every prospect that, by judicious working, profitable results will be realised.

Current Prices of Stocks, Shares, & Metals.

MINES.—We ventured to anticipate, in our remarks of last week, that the market value of dividend shares, as well as some others of first-rate character intrinsically, had nearly reached a maximum price, and the events of the week fully bear out this conjecture, there being some rather serious differences to note in the value of most of the dividend and other shares dealt in, which will be found in our quotations of business done. The reaction is, however, perfectly healthy and natural, and clearly indicates the fact that the capitalist, warned by past losses, is becoming daily more cautious, by not paying such rates as would leave less than 12½ to 15 per cent. per annum interest of money. In all other respects the state of the market is satisfactory for the buyer, and, in some few instances, advanced prices have been obtained for favourite shares.

In the Metal Market, Lead is firm, at unaltered prices.—Foreign Tin has again been largely dealt in, at advancing prices: the market closes very firm, with an upward tendency. The price of English Tin has been raised 5*l.* per ton, and refined is hardly obtainable, even at the advance, but bars and blocks may be had, in second hands, under the quotations. Tin Plates firm, and in good demand.—Copper unaltered.

The following are the dividends declared during the past month:—

Mines	*Per Share.*	*Amount.*
North Pool	£15	£1500
Spearne Consols	5	640
Balleswidden	⅝	602
East Wheal Rose	15	1920
South Wheal Frances	16	1984
Carn Brea	2	2000
Bedford United	3s	600
Alfred Consols	8	2048
Devon Great Consols	£7	£7168
Wheal Buller	20	2560
Treviskey	15	1800
Trethellan	2½	300
South Caradon	2½	640
Wellington	½	512
Total		£24,274

Of foreign mines a dividend has been declared by the Cobre Company of 3*l.* per share, amounting to £36,000.

At the Tresavean meeting, on Tuesday, they did what they have not done there for 30 years, make a call. They must put down a new shaft to work a side lode.—United Mines account was not held as appointed, but postponed for the third time, on account of the absence of Mr. Michael Williams; he having returned, it was fixed to be held yesterday, when, in consequence of the loss of 400*l.* or 500*l.* a month, and the dislike to paying calls, they would, it was expected, resolve on discharging some of the agents, and about 100 labourers. Their neighbour, Great Consols, must also follow, for the same reason. The mines are feeling the effects of the late floods. At Plenty and Goonearle, they have put the engine idle; the great adit is choked, and the water up to surface. At Grambler, the adit is crushed, so that the water runs out of the shaft at surface.

The Callington Mines sold 45 tons of lead ore, at 18*l.* per ton.

Bryntail Mine sold 25 tons of lead ore, at 11*l.* 2s. per ton.

The next sampling of Trehane will be 55 tons of ore, of the best quality, and another parcel of 40 tons.—At Trelawny, 100 tons of No. 1 ores, and 70 tons of No. 2, were sampled on Wednesday.

A good lode has been cut in Bell and Lanarth, and in North Pool the lode in the shaft is producing about 15 tons per fathom.

An improvement is reported at Merllyn, in one of the pitches going further west than any of the former workings, and on a different lode, which is worth 40*l.* per fm. Forty tons of ore have been raised at the old lode, and the estimated yield of one pitch is 20 tons for the month.

At North Roskear meeting, on the 13th Jan., the accounts showed—By amount of ore sold in November, 4870*l.* 3s. 10d.—Costs for Oct. and Nov., 4164*l.* 3s. 11d.: leaving profit, 705*l.* 19s. 11d.—By dividend of 5*l.* per share, 700*l.*: leaves balance, 5*l.* 19s. 11d.; add balance from last account, 1845*l.* 8s. 5d.: leaves now in hand, 1851*l.* 9s. 4d.

At the South Caradon meeting, on Tuesday, a dividend of 2*l.* 10s. per 256th share was declared, and a balance of 894*l.* 3s. 6d. carried to the credit of the next account. The accounts showed—Ores sold in October, 2224*l.* 4s. 6d.; ditto November, 1963*l.* 3s. 3d. = 4187*l.* 7s. 9d.—Costs for Sept. and Oct., 3049*l.* 3s. 1d.—leaving profit, 1138*l.* 4s. 8d.; to which add 395*l.* 18s. 10d. balance of previous account, and deduct 640*l.* for dividend, leaves 894*l.* 3s. 6d. to credit of next account.—The report states—"Our prospects are still good; we have been able to carry out our promise of giving you an increased dividend, and also increased the balance in hand."

At the Trethellan meeting, on Tuesday, the accounts for Nov. and Dec. showed—Balance from last account, 336*l.* 7s. 11d.; ores sold (less dues), 374*l.* 16s. 11d.; sale of materials, 148*l.* 14s. 9d. = 859*l.* 19s. 7d.—To costs and merchants' bills, 390*l.* 1s. 7d.—By dividend of 2*l.* 10s. per share, 300*l.*: leaves balance in favour of adventurers, 169*l.* 18s.

At the Tresavean meeting, on Tuesday, a call of 10*l.* per share was made The accounts were—Labour cost for Nov. and Dec., including merchants' bills, 2242*l.* 4s.—Copper ore, &c., sold (less dues), 1551*l.* 19s. 9d.: showing loss, 690*l.* 4s. 3d.; from which deduct balance in hand from previous account, 367*l.* 13s. 6d., leaves now against the adventurers 322*l.* 10s. 9d.

At the meeting of the Holyford Copper Mining Association, the accounts showed a balance of 1412*l.* 7s. 3d. in favour of the mine on the last six months' working; also an increase of 139 tons in the ore raised, and a decrease in the expenses of 968*l.* 9s. 7d. The liabilities amount to only 232*l.* 1s. 8d.; and the bills and cash in hand to 360*l.* 5s. 1d.; the machinery, steam-engine, and other property on the mine, is estimated at 2115*l.* 14s. 1d., exclusive of the various buildings. The directors, in their report, express no decided opinion as to their future prospects, on account of the uncertain extent of the bunches of ore that have been opened on; in some parts of the mine, however, the produce is good, and the ore of rich quality. Should the amount produced be equal in 1851 to that of the past year, a fair balance will be left at the disposal of the shareholders. Mr. W. H. La Serre was elected a director in the place of Mr. F. L. Mesurier, for the present year.

At the Callington quarterly meeting, the accounts showed—Mine cost and other disbursements, including balance of last account (2669*l.* 5s. 9d.), 5468*l.* 4s. 5d.—By silver-lead and copper ores sold in Aug., Sept., and Oct., 2025*l.* 9s. 1d.; instalment, 1000*l.*: leaving balance against adventurers, 2442*l.* 5s. 4d. The report of the directors stated that Capt. W. Lean had been chosen, instead of their former managing agent; that the operations were now being actively prosecuted; and their prospects were, in their opinion, much more favourable, both as regards the lead lode and the Kelly Bray copper lode. The agent's report stated that more ore ground was now opened, and the prospects of the mine becoming profitable much greater than at the last general meeting.

At the West Wheal Seton meeting, the accounts showed—Labour cost and merchants' bills, 954*l.* 17s. 3s.—By copper ores sold, less 1-15th dues, 408*l.* 18s. 9d.: leaving balance of 545*l.* 18s. 6d.; to which add balance of previous account, 54*l.* 18s. 4d. = 600*l.* 16s. 10d.—Amount of call received, 400*l.*: leaving present balance against the adventurers, 200*l.* 16s. 10d. A call of 2*l.* per share was made. [The report of the agent will be found among our Mining Correspondence.]

The West Alfred accounts, referred to on the 18th January, have since reached us, they show—Total amount of costs to end August, including merchants' bills end Sept., 3446*l.* 9s. 3d.; labour cost for Sept., Oct., and Nov., 636*l.* 6s. 10d.; merchants' bills, Oct., Nov., and Dec., 1353*l.* 18s. 4d. = 5436*l.* 14s. 5d.—By call made April 8, of 10*l.* per 128th, 1280*l.*; ditto Nov. 5, 25*l.* ditto, 3200*l.*: leaving balance against adventurers, 956*l.* 14s. 5d. By call now made of 1*l.* per share, 1024*l.*

At Wheal May meeting, which was well attended, the accounts showed a balance of 212*l.* 13s. in favour of the mine; the cost for the two preceeding months was 66*l.* 6s. 6d. Measures were adopted for completing the registration of the company, and resolutions were passed expressive of the satisfaction of the shareholders at the prospects of the adventure. An engine is now in course of erection at the mine, after which the workings will be actively prosecuted.

At the West Goginan meeting, on Tuesday, a call of 2s. 6d. per share was made. The operations at the mine were represented as progressing satisfactorily, and sanguine expectations are entertained of the results.

At the meeting of the Abergwessin company on Wednesday, it was resolved that a new lease should be applied for in the names of four of the shareholders present, each engaging to take as large a number of shares as are now held by them, and to recommend them as an investment to their friends. Much regret was expressed on account of the past mismanagement of the undertaking, owing to which many of the calls had not been responded to, and the works at the mine had in consequence been suspended. One of the proprietors of the land was present, and pledged himself to grant his portion of the land to the company. It was also agreed that those among the old shareholders who have paid up their whole calls of 10*l.* per share, should not only be entitled to their full number of shares in the new company, but have a preference as regards any additional number required. The exertions of Major Adair and Mr. Howard on behalf of the company were warmly acknowledged at the meeting, and full confidence was expressed in the success of the operations about to be undertaken.

At the South Plain Wood meeting, on Tuesday, the accounts showed—Balance from last account, 91*l.* 17s. 10d.; call of 1*l.* per share, 1024*l.* = 1115*l.* 17s. 10.—By labour cost, Oct., 196*l.* 9s. 2d.; ditto Nov., including merchants' bills not due, 241*l.* 13s. 9d.; balance of cost of leat, 31*l.* 6s.; rent, 51*l.*; buildings, 12*l.*; Messrs. Nicholls and Williams, on account of contract, 150*l.*: leaving balance in favour of the mine of 433*l.* 8s. 11d. A call of 5s. per share was made, and three shareholders were appointed to audit the accounts. From the report of the committee, and that of Captain Stephens, it appeared that the indications, from the first of an encouraging character, improved as the working proceeded, and the caunter lode had yielded some fine specimens of yellow and grey copper ore. The necessary buildings at surface are nearly completed: the agent is about being permanently located on the mine; the lodes are said to look very promising, and give every indication of a good mine in depth.

At the Tyn-y-Worglod meeting, a general statement of the company's affairs was laid before the shareholders, from which it appeared that the purchase of the quarry property had been completed, and funds provided for developing its resources. The report of Mr. St. Pierre Foley gave a very favourable account of the present operations and future prospects of the company. The available capital is upwards of 3500*l.*, which is deemed more than sufficient to meet the expenditure until returns are made. Several gentlemen of capital and influence are now included in the proprietary, and very sanguine expectations are expressed as to the successful issue of the undertaking.

The report of the directors of Cameron's Steam Coal and Swansea and Loughor Railway Company, at their meeting, on Thursday, recommended the prosecution of the line connecting their property with the port of Swansea, a bill for the construction of which is now before Parliament. The line is now ready for the reception of the rails, which will be purchased as soon as there are sufficient funds arising from the calls due from the shareholders. No other business but that connected with the railway was brought before the meeting, and the report was unanimously adopted.

We understand that the committee of the Company of Copper Miners in England, being dissatisfied with the manner in which the cause of Fox *v.* the Company of Copper Miners was argued before Lord Campbell, in which case an adverse judgment was given, have applied for a copy of the judgment of the learned lord, in order to see if there are sufficient reasons to move for a new trial.

In Foreign Mines, the United Mexican have fluctuated during the week, the prices quoted being as low as 4⅝ to 5. Business has also been done in Copiapo, Cobre, St. John del Rey, Linares, and Worthing.

The conditions of sale by tender, in March next, of a parcel of about 100 tons of lead ore, at the Austrian Imperial Mines at Mies, in Bohemia, have been announced by the Austrian Government. Among the chief conditions are, the deposit of 1500 florins at Vienna, or 150*l.* in London; tenders to be made for the whole quantity, and the ore to be taken away within two months of the acceptance of the tender, the minimum price of which is fixed by the Austrian authorities. The tenders are to be forwarded to the Imperial Mining office at Pezibram, in Bohemia.

The Alten Mining Association have received despatches, detailing the state of the workings at the different mines. At Raipas Mine, the discovery lately made in No. 11 has not as yet fully realised the expectations formed of it. In the level driving east a vein of purple ore had been met with, but in other parts there was no alteration. The prospects of the United Mines were considered promising, and operations had been resumed on Ward's lode, of which the produce was good. At the Old Mine, the returns of ore were good, and the quality of ore at Slungi's sink was improving; and at the north-east the prospects were still better, and the tributers making fair returns. The unfavourable season and bad weather have tended to retard the operations. The returns to the smelting-house have not exceeded the estimates, in consequence of the low per centages—the produce of the mines collectively, for November, being 177 tons, and the average of fine copper 11·77.

A report on the Quænangen Mine, dated December 21, has also been received, which is generally satisfactory. More than 3 fms. were driven on the adit in Oct. and Nov., and from the lode C 10 to 12 tons of ore per month were being raised. The ore is more concentrated than formerly, being one-fourth of a fathom thick, and wholly composed of purple ore; about 35 tons are ready for shipment. A vessel lately arrived at Kaafjord with 36 tons of ore, the exact result being 31·883 tons net weight at 10½ per cent., yielding 3·348 tons of copper. Favourable expectations are entertained as to the results of the other workings.

The Linares weekly report contains no new feature of importance. The men are proceeding in sinking the engine-shaft under the 30 fathom level, and with the cross-cut in the 45. In Wilson's shaft, the lode is worth 4 tons to the fm., and the appearance of the 45 fm. level, east of Shaw's shaft, is decidedly improved. The tribute pitches are working satisfactorily, and the building of the smelting-house is actively proceeding. The total amount of ore in stock at Linares, Seville, and Malaga is 485 tons 6 cwts.

By the monthly report of the Australian Mining Company, just issued, we learn that operations are actively in progress for developing the mines. Shafts are being sunk, and lodes tried, in three distinct parts of the estate, without, however, increasing the charges on the establishment. Hagen's lode is about 2 ft. wide, and the underlay is composed of carbonate of iron, in hard loose stones, much spotted with ore, all the soft part being soft spar and spotted ore. The two lodes in the 10 fm. level are spotted with ore, saving work. A fresh lode has been discovered near the north end workings, containing some good ore; and at Mellandilla the iron lode has been found destitute of copper, though it is believed that a rich copper lode exists in this locality. A letter from Major Campbell, dated Adelaide, October 3, states the prospects of the undertaking to be most encouraging, and that everything looks well and hopeful; and, in another communication of a later date, after an inspection of the mines, he says they have recently cut a vein of rich ore in sinking Phillips's winze below the adit, which promises to expand as they descend, and in other parts of the mines a marked improvement was visible—a new lode 3 ft. wide having also been discovered in a quarter where no ore had hitherto been found, and on which workings have been commenced. The major anticipates much advantage when the crushing mill is got to work, and expresses full confidence in the ultimate success of the undertaking.

The Copiapo report, read at the meeting on Thursday, stated that 456 tons of copper ores had been sold at Swansea since the meeting in Aug., realising 6100*l.*; 60 tons of silver leavings were also sold, which realised 27*l.* 10s. per ton. About 450 tons of copper ore may be expected at Swansea in May. The ore raised at the mines for the six months ending Oct. last, amounts only to 332 tons, but greatly increased returns are expected in future. The new mines acquired by the company are expected to turn out of great value to the company. The sum expended on the silver mines, including the purchase money of 5250*l.*, amounts to 13,910*l.*, and the value of the silver extracted to about 11,580*l.* The gold mine expenditure is 3285*l.* up to June last, and the returns only 375*l.*; and, by the direction of the manager, the workings, with the exception of two of the gold mines, have been suspended; but the value of the shares in the different silver mines was considered to be enhanced by the operations now being carried on. An additional number of miners are about to be sent out; and, in conclusion, the directors congratulate the shareholders on the prosperous and satisfactory position of their property in Chili, and the affairs generally of the company. The report was adopted by the meeting. The total amount of ore in stock at the end of Oct. was 1643 tons. A remittance of 2000*l.* is expected by the next mail.

At the half-yearly meeting of the Cobre Company, on Tuesday, a report of a decidedly favourable character was submitted to the shareholders. From the funds in hand, arising from the sale of ores, the directors were enabled to declare a dividend of 3*l.* per share. The ore raised up to last Nov. was 16,266 tons, being rather less than the quantity for the same period last year. There was, however, an improvement of about 1½ per cent. in the produce of copper compared with that of the preceeding year. The diminished quantity is attributable to an inadequate supply of labour, and the unusually heavy rains. An additional number of miners has been sent out, by which step it is expected that the ore raised will reach the average quantity, and the steam-power is about to be increased, in consequence of the greater depth of some of the workings. The report was adopted, and Sir John Pirie and G. Whitmore, Esq., were again chosen directors for the present year. The dividend of 3*l.* per share now declared amounts to 36,000*l.*, which, added to 48,000*l.* paid during the first part of the current year, makes the total dividends of the year 84,000*l.* The first dividend declared by the company was in Jan., 1836, since which period 511,200*l.* have been paid to the shareholders, exclusive of the dividend just declared, thus yielding an average nett return on each original share of 40*l.*, or 7*l.* 2s. per cent. per annum. At the last half-yearly meeting, the reserve fund was between 27,000*l.* and 28,000*l.*, to which it is intended that 5 per cent. shall be added from each dividend, until it reaches 40,000*l.*, when the interest of that fund will be added to the dividends, in addition to the entire profits derived from the undertaking.

At the half-yearly meeting of the United Mexican Association, on Wednesday, of which a full account is given elsewhere, the report of the directors stated the outlay on the mines from Jan. to Oct. last to be $75,750, and the receipts from the workings of Rayas $64,739. The disbursements on account of dividend, salaries, quicksilver, &c., were 22,146*l.* 9s. 6d., and the present available assets of the association consist of Exchequer bills, &c., 11,637*l.*, exclusive of the sum reserved on account of unclaimed dividends, making altogether 18,254*l.* 15s. Out of this sum the directors do not deem it advisable to declare a dividend, the reason assigned being the possibility of fresh outlay being required for the working of the new mines, and the undesirability of trenching too closely on their present funds; the chairman stating, however, that, should advices of a remittance shortly arrive, justifying such a step, a dividend would be forthwith declared. Considerable discussion took place, and an amendment was moved by a proprietor, to the effect that a dividend of 3s. be declared. This was negatived by the meeting, and the directors' report was adopted. From the report, it appears that the contract for the Rayas Mines expires in Dec. next, and, from the terms demanded, it was not likely to be renewed.

At the adjourned meeting of the North British Australasian Loan and Investment Company, at Aberdeen, a series of resolutions was agreed to, the chief of which was, that the sum of 25,000*l.* be raised by the creation of 25,000 preference shares, such shares to be entitled to a dividend in perpetuity, not exceeding 7 per cent., in preference to the original shares; also, that the whole property, funds, assets, and revenues of the company shall be liable to the payment and extinction of the liabilities of the company. The preference shares are, by other resolutions, directed to be paid by four instalments of 5s. each, and distributed in the proportion of one to every four shares held by the present shareholders; such shares as are not accepted to be disposed of as the committee think fit; and unless three-fourths of the preference shares be taken, the allocation shall be null and void. The other resolutions refer to the instalments that may be unpaid, in which case no dividend will accrue on such shares. The committee of management is authorised to take steps to carry out the resolution respecting the issue of new shares above referred to.

HULL, THURSDAY.—Messrs. T. W. Flint and Co. state that mining shares have been done to a moderate extent; they expect more demand for this kind of security as the year advances. Wellingtons, Tremaynes, Trefusis, and Bedfords, would find buyers—Wellingtons, 15*l.* to 15½*l.*; Tremaynes, 20½*l.*; Trefusis, 18*l.* to 19*l.*; Bedfords, 6¾*l.* to 6¾*l.*; Gustavus, 5¾*l.* to 6*l.*; West Tolgus, 5¾*l.* to 6*l.*; Speedwell, ½ to ¾ pm.—In railway shares the operations have been chiefly on the side of purchasers, and holders seem disposed to look on for higher rates.

CAMERON'S COALBROOK STEAM-COAL COMPANY.—In the Bail Court, yesterday, Mr. Harris applied for a rule to show cause why a mandamus should not issue to compel the company to expose their books for the inspection of the shareholders—one of their laws being to that effect. The application was made on behalf of Mr. Cameron, who had leased the mines to the company, and, although a large shareholder, had been refused an inspection of the books.—Rule granted.

MADRID AND VALENCIA RAILWAY.—In the Vice-Chancellor's Court, yesterday, sanction was obtained to have a sum of 16,000*l.* invested in Exchequer Bills—that amount having been received in Spain as assets of the company. The money was at present in the Bank, and the Court made an order, giving the Master permission to invest the sum named, as also any other amounts received, as he should deem desirable.

LEAD ORES

Sold at Chester, on the 27th of January.

Mines.	*Tons.*	*Price per Ton.*	*Purchasers.*
Bryntail	25	£11 2 0	Walker, Parker, & Co.
Sold at Aberystwith.			
Cwm Sebon	16	£16 16 0	Newton, Keates, & Co.
Sold at Bagillt.			
Cairnsmore	40	£11 1 6	Walker, Parker, & Co.
Caeconroy	35	14 3 0	ditto
Machynlleth	41	10 2 6	Newton, Keates, & Co.
ditto	8	12 2 6	Walker, Parker, & Co.
Shallee	40	16 5 6	Newton, Keates, & Co.
Sold in London.			
Callington	45	£18 0 0	Sims, Willyams, & Co.

BLACK TIN

Mine.	*Tons.*	*Price.*	*Purchasers.*
Plymouth Wheal Yeoland	2½	£50 2 6	Daubuz.

COPPER ORES.

Sampled Jan. 15, and Sold at the Royal Hotel, Truro, Jan. 30.

Mines.	*Tons.*	*Price.*
Consolidated	106	£4 12 0
ditto	104	4 6 0
ditto	97	4 12 6
ditto	76	6 0 0
ditto	72	4 6 0
ditto	67	4 8 0
ditto	49	3 3 0
Perran St. George	81	3 6 6
ditto	72	7 2 0
ditto	58	3 6 6
ditto	57	5 12 6
ditto	56	5 9 0
ditto	55	10 15 6
ditto	47	2 17 6
ditto	44	5 6 6
ditto	43	3 13 6
ditto	41	3 13 6
United Mines	95	2 13 0
ditto	79	6 10 6
ditto	67	4 0 6
ditto	63	2 9 0
ditto	62	5 16 6
ditto	40	0 19 6
ditto	38	3 19 0
ditto	31	6 2 0
ditto	22	3 2 6
Treviskey	77	5 0 6
ditto	75	3 8 6
ditto	66	5 18 6
ditto	62	4 14 6
ditto	59	6 14 0
ditto	56	6 2 0
Treviskey	51	£7 6 0
ditto	39	4 9 0
Par Consols	73	5 17 6
ditto	71	6 9 0
ditto	69	6 7 6
ditto	49	4 12 6
ditto	40	3 14 6
South Caradon	91	8 17 6
ditto	44	8 17 0
ditto	38	5 0 6
ditto	31	6 2 6
South Tolgus	62	3 13 0
ditto	53	3 12 0
ditto	32	6 6 6
ditto	28	11 5 6
Trethellan	55	3 4 6
ditto	39	1 16 0
ditto	20	2 1 6
Treleigh Consols	57	3 4 0
ditto	37	4 17 0
Wheal Mary	33	3 18 6
ditto	29	2 10 0
ditto	11	1 13 6
Wheal Ellen	54	5 12 6
ditto	12	3 2 0
Wh. Unity Consols	53	3 4 0
Wh. Busy	38	3 3 6
Wh. Henry	37	5 15 6
Gonamena	30	7 7 0
Carthew Consols	23	3 1 6
Wh. Penhale	6	3 14 0

TOTAL PRODUCE.

Consolidated	571	£2598	3	6	Wheal Mary	73	£220 9 0
Perran St. George	554	2869	19	0	Wheal Ellen	66	340 19 0
United Mines	497	1999	7	0	Wh. Unity Consols	53	169 12 0
Treviskey	485	2610	11	0	Wh. Busy	38	120 13 0
Par Consols	302	1702	6	6	Wheal Henry	37	213 13 6
South Caradon	204	1577	17	0	Gonamena	30	220 10 0
South Tolgus	175	935	4	0	Carthew Consols	23	70 14 6
Trethellan	114	289	1	6	Wheal Penhale	6	22 4 0
Treleigh Consols	94	361	17	0			

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	153	£948 3 6
Vivian and Sons	662	2300 15 3
Freeman and Co.	383	1660 16 10
Greenfell and Sons	539	2358 9 8
Crown Company	10	73 10 0
Sims, Willyams, and Co.	631	2621 17 1
Williams, Fester, and Co	564	3661 19 8
Schneider and Co.	184	784 9 0
Mason and Elkington	196	921 0 6
Total tons	3322	£16,323 1 6

Average Standard £102 13 0 | Average Produce 7¼
Average Price per ton £4 18 0
Quantity of Ore 3322 tons | Quantity of Fine Copper, 247 tons 19 cwts.
Amount of Money £16,323 1 6

LAST SALE.—Average Standard £95 4 0.—Average Produce 9½
Standard of corresponding sale last month, 110*l.* 1s.—Produce, 6¼.

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Tincroft 715—Wheal Seton 646—Wheal Basset 556—North Pool 526—East Wheal Crofty 422—Camborne Vean 336—East Pool 334—Condurrow 272—Fowey Consols 270—Dolcoath 209—South Wheal Frances 208—North Roskear 151—West Fowey Consols 68—Pendarves Consols 62—Wheal Harriet 12—Wheal Banns 12.—Total, 4799 tons.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—Carn Brea 728—Tywarnhayle 578—Wheal Buller 337—Par Consols 276—Alfred Consols 235—Levant 171—Wellington Mines 165—Polberro Mine 144—West Wheal Treasury 141—Wheal Tremayne 117—West Wheal Seton 115—Wheal Agar 53—East Godolphin 52—St. Aubyn and Grylls 33—West Wheal Providence 28—Wheal Vyvyan 20—East Wheal Treasury 14—Copper House slag 12—Wheal Friendship 11—Wheal Susan 7.—Total quantity of ore to be sold, 3240 tons.

ROYAL COLLEGE OF CHEMISTRY,
OXFORD-STREET, LONDON.
THE PRACTICAL COURSE OF INSTRUCTION IN THIS INSTITUTION
Is under the direction of Dr. A. W. HOFMANN and Assistants.
The SUMMER SESSION will COMMENCE on MONDAY, the 10th of March next, and End on Saturday, the 26th of July, 1851.

The FEE for Students working every day during the session is	£15	0	0
,, ,, ,, four days in the week is	12	0	0
,, ,, ,, three days in the week is	10	0	0
,, ,, ,, two days in the week is	8	0	0
,, ,, ,, one day in the week is	5	0	0

Hours of Attendance from Nine to Five.
Further particulars may be obtained on application at the College. 62

ROYAL POLYTECHNIC INSTITUTION—MORNING CLASS.—TO NAVAL OFFICERS AND OTHER GENTLEMEN.—A COURSE of TWELVE LECTURES, on the APPLICATION OF STEAM TO MACHINERY, will COMMENCE early in MARCH, under the direction of J. H. PEPPER, Esq., Associate of the Institution of Civil Engineers, &c.—Fee Three Guineas. 63

CHEMICAL, MINERALOGICAL, AND AGRICULTURAL SCHOOL,—38, *KENNINGTON-LANE, LONDON.*
The SCIENTIFIC DEPARTMENT under the direction of J. C. NESBIT, F.C.S., F.G.S. one of the Principals.
INSTRUCTIONS are given in AGRICULTURAL CHEMISTRY, and the making of ARTIFICIAL MANURES.—Mineral Analysis taught in all its branches. Analyses performed as usual, on moderate terms. 64

NOTICES TO CORRESPONDENTS.

In a few weeks we shall publish the commencement of a SERIES OF PAPERS, to be continued weekly, detailing

The History of Mining,

ITS RISE AND PROGRESS:

together with NOTICES of the EARLY METHODS OF WORKING; ANCIENT and MODERN INVENTIONS, with their subsequent IMPROVEMENTS; comprising also

A SKETCH OF METALLURGICAL OPERATIONS,
from the EARLIEST PERIOD to the PRESENT TIME.

The Great Exhibition.

In the "MINING JOURNAL" will also be given a detailed description, with all necessary illustrations, of every object connected with MINING and ENGINEERING, which may be produced at the forthcoming Great Exhibition.

The Compendium of British Mining,

BY J. Y. WATSON, ESQ., F.G.S.

We have the pleasure to announce, that Mr. WATSON has consented to revise and correct, to the present time, his interesting EPITOME OF BRITISH MINES, for re-publication in our columns—the fifth portion of which appears in this day's Journal. In the "Compendium of British Mining," it will be remembered, the actual position of the different mines is accurately described, both as to capital and working.

At the end of each year, a copious Index is published, which renders the volume an interesting and valuable record.

Mr. Evan Hopkins is now in Cornwall, but will be inspecting collieries in the neighbourhood of Swansea in the course of three weeks.

SOUTH WHEAL JOSIAH.—In the Journal of last week there was an error in Capt. Heath's report—in the fourth line, for 2½ fms. wide, read 2½ feet wide.

"Mining Agent" (Redruth).—It is hardly possible to write on the subject of geology and metalliferous formations, without repeating what has been previously expressed by former writers. The "Compendium of British Mining," by Mr. Watson, and which is in course of publication in the columns of the *Mining Journal*, is original. It may assimilate very closely to Mr. Henwood's paper on the "Metalliferous Deposits of Cornwall and Devon," but does not in the slightest degree diminish any merit which may be due to that gentleman for his valued publication.

"Argus" (City).—Among our notices to correspondents last week, was one in which Capt. Taylor's name was mentioned as having been surreptitiously employed to give weight to certain reports of a particular mine. We have received a communication from Capt. Seymour, in which he states that the writer of the report was the son, and not the father, and that he is about communicating with all parties, and will forward every information in the course of next week.

"J. K. R." (Liverpool).—There is no office for the Bolivar Mining Company—indeed, the concern may be considered as defunct. It is expected that in about two years a final dividend will be declared from the proceeds of the property. Mr. A. Allen, of Bargeyard, Bucklesbury, the late secretary, still officiates in that capacity, and will furnish any information that may be required.

"Delta" (Spring-gardens).—Mr. Paxton's project for affording gratuitous admission to the public to the Great Exhibition seems liable to greater objection than he probably imagined. We cannot help prefiguring to our minds the daily rush of visitors, and the scenes of discomfort and confusion to be apprehended therefrom: or if it be supposed that the latter can be prevented by stringent regulations, it is to be feared that these last would be something worse than the demand of a fee to secure the privilege of entrance. Nothing seems better calculated to ensure at least a manageable body of spectators than a moderate charge for admission, which the public, we doubt not, are prepared and willing to pay. This is but a homely view of the matter, compared with the more sublime views of Mr. Paxton; but it is forced upon us by what seems to be the impracticability of the latter in reference to the purpose of the Exhibition.

"J. B. D." (Horseley Furnaces).—The address of Dr. Lyon Playfair is 28, Jermyn-street, St. James's.

"M. E." (Euston-square) had better apply to a solicitor. Had he adopted the course we invariably recommend—that of consulting a mine agent previously to purchasing the shares—he would have avoided his present difficulty.

"Argus" on the "Compendium of British Mining," shall appear next week.

The papers forwarded from Jamaica have been left where requested: we were unable to use them, the subject not being suitable for our Journal. We should be glad of any mining news.

THE SHARE LIST.—We have received several further letters, some approving, and some objecting to our recent alterations. One important feature appears to be better understood, that of the *district* in which the mine is situated being shown, and the necessity of shareholders becoming familiar with the locality of their setts. When the nature and objects of the alterations are better understood, we feel assured the list will be appreciated by both agents and adventurers. We intend shortly adding the amount of dividends paid by each mine, with such other improvements as may present themselves. One correspondent *suggests* what he terms a "very ready way of obtaining correct quotations"—that of making us purchase shares at the prices at which they are marked! Perhaps our correspondent might also add, that shares should be "sold at the prices quoted." Our endeavour is to furnish true quotations; but it will so happen that those given by parties are frequently to be considered as to whether they are buyers or sellers. However, the evil will cure itself, and it will not be our fault if unfair quotations be given.

Mr. Hopkins's work, "On Terrestrial Magnetism," has been some time out of print; but a second edition is being prepared, and will be shortly ready for publication.

"Enquirer" (Bristol).—Dr. White's new method of ballasting ships was described in the Journal on the 3d August last.

"B. N." (Leadenhall-street).—We have never been able to learn any particulars of the Annotto Bay Mining Company—the office is in Lombard-street Chambers.

"A Constant Reader" must seek some other medium than our Journal for the publication of his "thoughts and reflections." We do not at all anticipate the end he predicts.

"A Miner" (Scotland).—What is called "French polish" is a solution of shellac in spirits of wine. In its application our correspondent appears to be decidedly ignorant: although giving a perfect glossy surface, it cannot be used as a varnish, but requires great delicacy and much practice to operate with it successfully. A piece of cotton wool, in size regulated according to the work to be performed, is wetted with the polish, covered with a piece of fine soft calico, on which as much linseed oil as can be taken up on the finger is placed, and the wood rubbed with it. The cotton rubber must be continually at intervals supplied with polish, and the calico cover as often oiled; and in the proportions and peculiar method of manipulation lies the whole secret of "French polishing"—a secret which can only be acquired by practice.

"A Looker-on" (Liskeard).—There is no doubt that, to a certain extent, our correspondent's observations on mine sharebrokers are correct; but if he has had any lengthened experience in the matter, he must be aware that a very important change for the better has lately taken place in their general character and mode of proceeding. A mining sharebroker of the present day, if he wishes to maintain his position in society, must act with something like honesty and straightforwardness.

"A. D." (Sheffield).—Pastes are the most frequent substitutes for precious stones. The foundation of all pastes is a superior colourless glass, called *strass*, made from very pure materials, and afterwards coloured by the addition of metallic oxides, in much the same manner that ordinary coloured glass is made, except that the process is more carefully performed throughout. The French are considered to excel in the preparation of pastes, and a variety of recipes for the manufacture of pastes, derived from various French authors, are given in Dr. Ure's "Dictionary of Arts," and also in Gill's "Technical Repertory," vol. ii.

COMPENDIUM OF BRITISH MINING.—We have received a communication from Mr. R. Williams, jun., of East Crowndale Mine, in which he calls attention to some errors in Mr. Watson's statements. It should be remembered, that Mr. Watson's motive has been solely to enlighten the uninitiated, and slight errors, which can only be discovered by practical men, should be treated gently, as they certainly form no subject for censure. At the same time, we are obliged to correspondents for their letters, and we are quite sure Mr. Watson is far from being offended in being set right in any points on which he may have been misinformed. The writer states that tinstuff need not be reduced to a fine powder, but is oftentimes left as large as peas or beans. He also describes the stamps grates as being composed of pierced sheet-iron, and not copper.

"F. P." (Andover).—According to the arrangement at present laid down by the Commissioners, mineral productions will, in the Palace of Industry, be near neighbours of agricultural produce and implements. Possibly the Commissioners are of opinion that what is extracted below the earth's crust may be brought into fit opposition with what is obtained upon its surface. The show places of the Exhibition will be reserved apparently for all that is light and brilliant in manufactures and art—an arrangement not to be complained of, since those who look for the more solid and useful products of invention and genius will not grudge the trouble of investigation, whether the latter are, by comparison, advantageously placed or not.

"An Old Mexican."—We regret that the engagements of our correspondent prevented his being present at the meeting; as, in that case, he would have seen that those who were clamorous for an immediate dividend (an exceedingly desirable object, doubtless, in the abstract) comprised only a small section of the meeting—the majority of whom seemed fully convinced, by the reasons adduced by the directors, that the latter would not be justified in making a dividend at the present juncture. "An Old Mexican's" idea of adjourning for a week or 10 days, which he says the directors ought to have done, is open to this objection, that it is by no means certain that the expected remittances will arrive by the next mail, or even advices of their coming. Under the circumstances, we think, the directors took the best course that could be adopted, and were fortunate enough to obtain the sanction of the meeting.

"H. C." (Lostwithiel).—Mr. Watson, we are sure, has no objection to any fair criticism on his "Compendium of British Mining," whether from "Argus" or any one else. It is obvious, however, that no opinion on any special point relating to mining matters can be deemed applicable or correct in all cases; and also that such expressed opinions as those alluded to are very likely to contradict the individual experience of other parties. Moreover, the multiplicity of details will always give some scope for cavil to those disposed to indulge in that amusement, although it is, of course, still an "open question," as regards accuracy, between the author of the "Compendium" and his critic.

PENTIRE GLAZE AND PENTIRE UNITED MINES.—We have received two letters from the purser of these mines, strongly reflecting on "Fair Play" and Capt. W. Bishop, the late agent, whose communications have appeared in our columns. We are anxious at all times to render impartial justice to our correspondents, but we must in the present instance decline the insertion of the remarks alluded to. When what should be argument is converted into personality, we think it time to drop the controversy. Mr. Rowlandson has also written to us to say that he has been prevented by his engagements from replying to the observations made on the working of this property, but that we may expect a communication next week. We really think there is but little room for further discussion, likely to lead to any advantageous result.

"An Adventurer" (Manchester).—There is much contrariety of opinion as to the power to forfeit shares; but one point is certain, that if a shareholder in a mining company, carried on under the Cost-book System, neglect, or refuse, to pay the necessary calls due upon his shares, any creditor on the mine can sue him for his debt, on as good grounds as if it was a personal one. The withholding payment of calls leads to much mischief in the prosecution of a mine; and it is but reasonable that the general partnership body should have some means of redress against defaulters.

GREAT WHEAL SHEBA.—We have received more than one communication reflecting on the report of this mine, inserted in the *Mining Journal* of Saturday last. Capt. John Spargo suggests that the party who wrote it could not have properly inspected the mine, as there is a lode producing gossan and rich stones of yellow ore. That the lode in the adit, at only 10 fms. deep, is 8 ft. wide, and promising; and that, from all the indications of the mine, there is every prospect of riches being produced in depth. Capt. John Seymour believes that the writer can know little about the mine, and not much about the production of lodes generally, or that he is influenced by some unworthy motive. He states that the lode in the adit is worth treble what has been stated, and that the lode in the lobby and wheel-pit contains copper ore of a high per centage; and is willing to meet the party on the mine, and convince him of the erroneous nature of the statements he has made.

An unusual press of matter has, for the past few weeks, prevented the insertion of many valuable communications, which, under other circumstances, would have appeared in our columns, with much satisfaction to ourselves, and the edification of our readers. Among these are some papers by Mr. David Mushet. Mr. Evan Hopkins, and Mr. John Mitchell, which we shall take the earliest possible opportunity of inserting, and can here only apologise for their non-appearance hitherto, from inability to meet all claims on our space. We have also another correspondent in the Baron Von Rathen—a communication from whom has been standing over some weeks, and for which we fear we shall not be able to find room. We will, however, endeavour to give the spirit of his remarks on his compressed-air engine for railway propulsion—a system which we have more than once before described. The Baron asserts, and challenges investigation to prove the fact, that by the use of compressed-air in lieu of steam to locomotion, he can secure a saving of 75 per cent.—that by the employment of a single stationary engine, he can produce, and preserve in magazines till wanted for use, sufficient propelling power to supply from 20 to 30 powerful locomotives daily, for propelling trains, of any calibre, to distances of 20, 30, or even 50 miles, when the exhausted tenders would be changed for others ready charged. The Baron, as the patentee of a system of compressed-air locomotion, offers every assistance in his power, *gratis*, to the first two or three companies who may adopt it. He wishes to show that, in all cases of collision, the inefficiency of the break, as applied to the present locomotive engine, is clearly proved; while by his system a train might be arrested in its progress, with certainty and success, within a distance of between 200 and 300 yards. It is also stated that, in addition to its safety, the principle supported is more economical and more certain in its results.

"A Cornish Miner's Ramble" shall appear in our next Journal.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

*** It is particularly requested that all communications may be addressed—

TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, FEBRUARY 1, 1851.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

We have at length received a communication from Mr. J. H. JOBLING, the viewer of Jarrow Colliery, on the subject of the state of the workings, as described in the MINING JOURNAL of the 18th January; and, but for its arrival so late in the week, we should have inserted it entire—as, however, we think every justice can be done by giving a true outline of the facts, as related by Mr. JOBLING, we proceed to adopt that course. It appears that gentleman made application to Mr. MATTHIAS DUNN, and also to Messrs. W. ANDERSON, NICHOLAS WOOD, and THOMAS E. FORSTER, for their opinion as to the safety of the colliery under certain modes of working; to ascertain the quantity of air passing through the workings; if safe to work with naked candles; and whether it was prudent to allow careful persons to employ a candle for the purpose of blasting—a process indispensable for the obtainment of the coal. Mr. DUNN, in his report, bears testimony to the fact that a better system of ventilation had been secured by the adoption of certain measures; but he states that, notwithstanding the increase of air from the continual extension of the workings, and the system of bratticing adopted, he cannot sanction the practice of firing the blasts with candles, even under the discretion of the overman, or deputies, in a seam 6 ft. thick, subject to sudden eruptions of gas.

In the other report, Messrs. ANDERSON, WOOD, and FORSTER state that they have no hesitation in saying that the quantity of air passing through the mine was ample; and that the mode of ventilation was judicious and proper. That candles were perfectly safe in the eastern district of the mine; but they recommend the sole use of lamps in the western parts, which are liable to sudden discharges of gas. There appears to be some little difference of opinion expressed in the two reports—Mr. DUNN evidently not thinking the mine so safe as the other gentlemen referred to; who stated that the principle laid down—that the increase of the current of air should be made to keep pace with the extension of the workings—had been carried out; and that they considered the qualified use of lamps, under the proper and effective regulations adopted by Mr. JOBLING, sufficient to guard against the risk of sudden discharges of gas; and that the coal may with safety be blasted by gunpowder. So far, we trust it will be considered that we have done justice to the case. In Mr. JOBLING'S communication to us, he does not contradict one of the charges made by "M.," respecting the dangerous nature of the colliery, and the repugnance felt by the men to work in the manner persevered in by the viewer. It is true, he is to a great extent exonerated from blame by the opinions expressed by Messrs. ANDERSON, WOOD, and FORSTER, dated as late as the 25th January last; but we should have been better pleased to see the case more fully met by Mr. JOBLING, and his system more fully described. We do hope the insertion of "M.'s" letter, and the observations we felt it to be our duty to make, will still have some good effect, and at least keep attention alive to the importance and necessity of proper caution in so fiery a colliery as the one under notice.

As the statistics of the copper trade, given in the first Number of the MINING JOURNAL for the present year, and every detail of mining progress published in our columns, bear evidence of increasing prosperity in this staple produce of the country, it is an interesting topic to notice the fluctuations in the prices of this metal, and to elucidate the causes of depression and increase—circumstances which so seriously affect, either to their advantage or otherwise, not only the adventurer in the copper mines of Cornwall and Devon, but the majority of the population of those two mineral counties. In taking into consideration the changes which have taken place in the price of cake copper during the past 10 years, and the state of the market at the time of a rise or fall, in many cases no natural commercial reason can be found to warrant the fluctuation; but, on an analysis of the process of copper production, from extracting the ore to the sending the fine copper to market, it will be at once seen, that could the smelting business be rendered less a monopoly than it is—could the miner become his own smelter, and send his own refined metal to market—the relation of supply to demand would be far better regulated: great and sudden fluctuations would be unknown, and a firmness in price would result, yielding far better remuneration to the adventurer for his mining produce, and securing to the metal merchant a fair and legitimate remuneration for his capital employed. To bear out the justice of these observations, we need only refer to a review of the prices paid to smelters during the past few years, inserted in the *Cornwall Gazette* of the 18th ult., clearly showing that, as the middle men between the producer of the mineral and the purchaser of the metal, the smelters fix the prices just as their own whim or cupidity dictates. The writer says—

> At the time when the British market was thrown open freely by Sir R. Peel to the foreign miner, the price paid by the smelter to the British miner was 85*l.* to 86*l.* per ton. The vast influx of foreign metal quickly brought down the price, which, for the three following years, remained nearly steady at 84*l.* for cake copper. The avowed object was to bring all the smelting of the world to England, and the immediate results seemed to indicate that this object would be secured. In one year 20,000 tons of the rich Chili ores were imported. The smelters, to whom this monopoly was sought to be given, were blinded with power and prosperity. As they felt their power—standing between the miner and the merchant, the buyer and the seller—they fixed the price for both, and plundered both, growing more daring and rapacious as increasing wealth made them increasingly covetous. In 1843 and 1844 they were content with 8*l.* or 9*l.* per ton of copper, for all charges of smelting and profit; and as the price was fixed by themselves, it cannot be doubted that the amount was sufficient. But in 1845 they made a start to 16*l.* per ton, giving the miner 8*l.* less, while the market price of copper remained the same. In 1846 the price of cake copper had advanced from 84*l.* to 93*l.*; but the smelters advanced the price to the miner only 4*l.*, taking to themselves 21*l.* per ton profit. In 1847 cake copper fell to 88*l.* 10*s.*, and the price to the miner fell, in the same proportion, to 67*l.* 14*s.*, still leaving to the smelter 21*l.*, where he had been satisfied with 9*l.* only three years before. But the height of audacity appears in 1848, or rather in the latter part of 1847. The price of cake copper had advanced to 98*l.*, but instead of giving to the miner any share of the benefit, the smelters actually lowered the price to him nearly 4*l.*—thus adding nearly 14*l.* per ton to their previously extortionate profits. With cake copper at 98*l.*, they gave the miner only 64*l.*—thus taking 34*l.* per ton, where five years before they had been content with 8*l.* or 9*l.*

The smelters, probably alarmed at the effects produced, of which they were the immediate cause, and with which we do not believe the reduction of the duty on foreign ores had, *per se*, any thing whatever to do—seeing that the Chilian ores, of which 20,000 tons had arrived in one year, were held back for smelting at home, notwithstanding the disadvantages attending the operation there, and seeing smelting-works established at South Australia, and nearer home, at Hamburgh—began to retract. They returned, says the writer—

> Not indeed to the rate of profit which satisfied them in 1843 and 1844, when they deemed £8 or £9 per ton sufficient for their charges and profit; but they have been content with one-third of the amount which they took in the days of their most shameless plunder. Instead of grasping 34*l.* per ton, the sales for the present and past years show them to have taken from 11*l.* 12*s.* to 12*l.* Hence, with cake copper at 84*l.*, the miner is receiving a higher price by 7*l.* or 8*l.* than the smelters gave him when they were making 98*l.* The Chili ores, which had been driven from our shores by the unheard of extortion of the smelters, are now returning. The report of the last quarter shows 854 tons sold at Swansea, and the disadvantages under which the Chilian smelter labours will probably lead to increased imports. Henceforth, we trust that our mining interests will no more suffer from monopoly—plundering under the mask of free trade; but that all parties concerned will be governed by the principle of "Live, and let live."

It has been suggested by several correspondents, that the reports on the mines inserted in the Journal lose much of their interest, and that importance which ought to attach to them, through the absence of the names of the agents who furnish them. It is hardly necessary to remind our readers that the omission of the signatures to the reports was no act of ours, but that we were compelled, reluctantly, to the course adopted, by a resolution come to by the Commissioners of Stamps, of charging as advertisements every report having the name of the agent attached to it. In order to meet the wishes of many mining correspondents who have suggested this course, we now state that we are perfectly ready to insert the signatures to any reports, on pre-payment of the mere advertisement duty charged to us (1*s.* 6*d.*), and we have no doubt the offer will be availed of by many of our leading adventurers, and those parties anxious for the dissemination of correct and authorised information on the subject of the mines with which they are connected—to whom we must leave to determine what importance is attached to the adoption of a measure impressed upon us by the communications referred to.

It is but seldom we advert to prospectuses put forward for mining purposes, inasmuch that it is our anxious desire, if not our interest, to advocate the outlay of capital in pursuits of this nature which hold out promise, more especially where the chances of success are in some degree advanced by the application of talent and integrity, as well as that singleness of purpose which it so much behoves all parties embarking capital to observe in enterprises of this nature. We are led to offer one or two passing remarks on the numerous prospectuses which have lately appeared, and the tendency existing at the present moment to embark in mining pursuits. We have already said our province is to encourage outlay in the prosecution of mines; but there is also another duty which we feel to be imposed on us—that of guarding the capitalist from falling into snares set by the unprincipled speculator. The many statements put forward in print, while they are pleasing to the eye, and gratifying to the senses, so far as expectations may be indulged in, yet, at the same time, it will be seen that it behoves the capitalist well to examine the reports submitted, the prospectuses issued, and the names of the parties attached thereto, or who may be known to be connected therewith. It would be invidious were we to take to pieces one or other of these very clever productions; but as one of the latest which has fallen into our hands claims, we think, some notice, we will at once proceed to express our opinion; at the same time, that we regret a prospectus of the kind should have been issued. A few words will suffice to place it before our readers; while the letter of a correspondent, which appears in another column, will suffice indeed. Satisfied shall we be if, in briefly adverting to the subject, we so far direct attention as will elicit information of a more correct and explanatory nature. We may further observe that agents' reports should be looked upon with some degree of suspicion, inasmuch that they are not always acquainted with the locality; and as we know it is a well-paid "job" to write a glowing report, too much caution, we repeat, cannot be exercised. The prospectus to which we have referred, and which is now before us, purports to be the ——— and ———.

In the first place, as our correspondent very properly shows, the prospectus states that the company is to be carried out on the Cost-book Principle, with "10,000 shares, of 1*l.* each, all paid up; no further call can be made; and scrip certificates will be issued to secure the shareholders against any liabilities." This really "out-Herod's Herod;" for it does appear somewhat absurd to talk of the "Cost-book Principle" and "scrip certificates." A prospectus, as we have already observed, is now before us, which must have taken much time, while we admit the talent evinced in its construction. Not only is the Cornish historian brought forth, but the Devon Consols neighbouring mines, some few miles distant, and by no means lineable with the lodes in the sett taken up, are referred as to their riches. One of the mines comprised in the sett, we are told, was worked in 1834; and upon an outlay of 500*l.* only, dividends to the amount of 9000*l.* were declared in a space of six months; and the shares of 5*l.* sold at 1100*l.* A few "facts and figures" may better illustrate this. The mine was formed of 1000 shares, on which, we will assume, 10*s.* per share was paid, or 500*l.* A scrip company was then formed with 5060 shares, and an *assumed* capital of 20*l.* per share. Now, as the highest price per share obtained was about 40*l.*, this would give 200,000*l.* as the entire value attached to the mine—no slight advance, we admit, on the 500*l.* expended; but we are told in the prospectus that shares of 5*l.* each were within a few months disposed of at 1100*l.* We certainly do profess to understand something of "facts and figures;" but we must enter our protest against those assumed in the present instance, which are too absurd to require comment. As regards the sett, which forms an adjunct to the mine referred to, we believe that some 6000*l.* or 7000*l.* were expended under able management, and the mine abandoned from its poverty. These mines are now proposed to be associated, and taken up and worked by a company; and the projectors modestly ask for 4000 shares as their modicum, with 1*l.* per share paid thereon—"clearly showing their opinion of the present prospects;" a bonus, we presume, for property obtained for nothing; for it has been long in the market, and no risk run on the part of the projectors, but who pocket 4000*l.* It is under these circumstances that we must require more satisfactory data than that afforded us, ere we can recommend parties to embark. One other word, and we have done. Will the projectors commence operations when only 1000 shares are subscribed for, or 1000*l.*, and thus retain four-fifths interest, instead of two-fifths, as contemplated in the prospectus? or will they undertake to call a meeting of the adventurers, and submit a list of the subscribers—*Verbum sat sapienti?*

MINES AND MINING.—No. V.

BY EVAN HOPKINS, F.G.S.

The success of tin mining depends much on the system of separation underground, and the mode adopted to extract the ore from the matrix by stamping and dressing. Tin, like gold, is often so thinly disseminated in a hard rocky lode, as to require the stuff to be stamped into almost an impalpable state to effect the separation; and if this is done without adapting the coffers and grates of the stamps, and the incline planes and pits, in such a manner as will allow a natural separation to take place, according to the respective specific gravities of the ingredients forming the lode stuff, by means of the running stream, a large quantity of the inpalpable tin ore is lost, and much expense is incurred in the subsequent dressing by tyes and buddles. I know an establishment which had become a losing concern in consequence of the falling off in the value of the ore, and the expense and loss attending the dressing, which was established according to the old system of tin dressing in Cornwall. Since then I introduced a very simple improvement to the preliminary process connected with the stamps, and the consequence has been that the mine is now making a handsome profit from stuff that formerly would not pay cost. Were this better attended to in Cornwall, we should have a greater number of *tin*-paying mines.

ELECTRO-MAGNETISM AS A MOTIVE-POWER.

In the *Mining Journal* of the 28th Dec. we inserted the report of Prof. Page to the United States Senate, on the subject of his experiments on electro-magnetic forces as applicable to industrial motive-power, in which the author claims to have elicited some important facts, particularly one as connected with the economy of the power—that with the same size of battery, through a long course of experiments, it was found that as the size of the helices and bars were increased, a corresponding increase of power was exhibited, and the consumption of metal, or leading feature of cost, in some proportion diminished. In order to obtain a thoroughly impartial statement, by a person quite disinterested as an individual in the results, Prof. Walter R. Johnson, of Washington, was appointed to make a series of experiments on Prof. Page's engine, and report thereon. Accordingly two series of experiments were made, for the purpose of ascertaining the amount of power actually exercised by the machine, which had been exhibited at the Smithsonian Institution. Prof. Johnson directed his attention to ascertain—1, the proportion between the weight resting on the periphery of the fly-wheel to produce friction, and the amount of resistance to motion resulting from that friction: 2, the true periphery of the fly-wheel; 3, the amount of insistent weight or actual pressure caused by the friction brake; 4, the number of revolutions of the engine per minute under every load with which the engine was charged. The fly-wheel was found to be 13·29 ft.; the friction lever weighed 13 lbs. 6½ ozs., or 13·406 lbs.; the centre of gravity was 2 ft. 10½ in. from the fulcrum; and the fulcrum 7½ inches from the point of application of the lever, giving the pressure exercised by it upon the fly-wheel 62·78 lbs. The extreme point of application of the weights to the lever was 6 ft. 10 in. from the fulcrum, giving the leverage with which they act on the wheel 11·31 to 1. In testing the force of the friction brake, the weights were applied to the wheel at four points, to determine the difference of resistance at the various positions of the crank in its revolution. With 92·55 lbs. at the extremity of the lever, including the weight of the lever itself, the insistent weight on the top of the wheel being 1046·74 lbs., it took, to keep the weight barely moving, at the first point, 159 lbs.; second, 166 lbs.; third, 158 lbs.; and fourth, 158 lbs.; giving an average of 160¼ lbs. Thus, 160·25 ÷ 1046·74 = 153, or 15·3 per cent. is the ratio of the resistance to the weight which produced it.

The weights on the friction lever remaining as above, the battery was applied with one-fourth more excited surface than used in Dr. Page's experiments, when the engine made 88 revolutions per minute, equal to 5·7 horse-power. To ascertain the result of greater velocity with a diminished load, 14 lbs. were taken from the weight on the friction-brake, leaving 78·55 lbs. on the lever, and 888·4 on the wheel, giving a resistance of 135·9 lbs. This diminution of resistance did not give quite a corresponding increase of speed, the power indicating only 5·25 horse-power; and on taking 14 lbs. more from the brake, and the wheel making 102 revolutions per minute, the power indicated was only 4·58 horse-power.

The above experiments were made with stale acid in the battery employed five times previously, and fresh acid having been applied with an increase of one-twentieth of metallic surface, it was found that with 117·30 lbs. on the lever, 1326·7 lbs. on the brake, and the wheel making 96 revolutions per minute, the engine indicated 7·69 horse-power. The average of the experiments gave 6·03 horse-power, and, as it is stated by the inventor, that the cost for one-horse power for 24 hours is only from 10 to 20 cents., the economy of the arrangement is most important. The increase in the battery surface produced a useful effect, equal to 20 per cent., and Prof. Page has since stated that his engine has, since these experiments, realised 10-horse power with a stroke of two feet, fly-wheel 13·29 in circumference, 102 revolutions per minute, with 1900 lbs. pressure upon its periphery.

THE BOOK POST.—The Postmaster-General has adopted the principle of Mr. Lake's suggestion, relative to the transmission of printed works by the Post-office. Books may be sent on and after the 1st March from any part of the United Kingdom to any part of the British West Indies, Newfoundland, Gibraltar, Malta, or Hong Kong, or *vice versâ*, at the following low rates:—Not exceeding ½ lb. weight, 6d.; not exceeding 1 lb. weight, 1s.; not exceeding 2 lbs. weight, 2s.; and so on. And it is stated that as soon as the several other Colonial Governments agree to the measure it will be extended to them. Periodical works may also be sent through the post, when not exceeding 16 ozs. in weight, to the United States and Prussia, at a very low rate; and pamphlets, not periodically published, may be sent through the post to the United States at the same low rate of postage, but these must not exceed 8 ozs. in weight. This is very good; but we hope to see every limitation removed as to weight or period of publication.

SPANISH MINERALS FOR THE EXHIBITION.—The Spanish Consul has received a long list of articles expected to arrive in this country for the forthcoming Exhibition. Among them are minerals selected from the most splendid specimens which the Peninsula produces, consisting of silver ore, argentiferous galena, copper and iron ores of various kinds, and the several ores of quicksilver from Almaden. The manufacturers of Toledo are preparing specimens of their peculiar and famous steel; and every branch of industry is said to be alive to show the world that Spain is progressing, like other nations, in the development of the useful arts.

COALS FOR INDIA.—The Finance Committee of the India House will, up to the 12th Feb. next, receive tenders for the supply of 6000 tons of the best kinds of Newcastle steam-coal, and which contract is expected to produce much competition.

PROGRESS OF MINING IN SOUTH AMERICA.—We have received a report from a gentleman connected with the Veta Morena Mine, in the mineral district of Chanarcello, about 54 miles south of Copiapo, which is encouraging as to the prospects of the country. During 14 months, from June, 1849, to Aug., 1850, ore was raised which produced 52,439 lbs. of silver, realising at $18 per lb., the sum of $943,902. The entire cost of labour, materials, amalgamation, &c., amounted to $120,812—leaving a clear profit of $823,590. To organise a company for the purpose of more fully developing the resources of the country, the owners are about arranging a mass of information on the geology and mineral character of the district, from which it appears that all the attempts at exploration in the neighbourhood for the precious metals have proved the fact that they increase in richness in depth. There appears to be a want of capital in the country, or the people of Copiapo would ere this have embraced the opportunity of working these veins of silver, and it is intended to endeavour to enlist the capitalists of this country for the purpose of working the mines.

MINES OF LAKE SUPERIOR.—The latest accounts from Lake Superior represent the mines as in a good state of prosperity: 1500 tons of copper have been shipped, 800 of which were from one mine. Speculative operations had ceased, and every organised company had fixed upon a location, and was doing an active business in getting out copper. Traces of ancient mining continue to be found which prove of great service to the present miners, directing their attention to, the most feasible spots where excavations have been made, which could only be effected by arduous toil. These are supposed by the population to be at least 2000 years old. Nothing has been found, however, to show their connexion with any existing race; although it appears that the copper mined was taken off by way of St. Mary's River and the lakes, from the detached portions which have been found on the road between the mines and St. Mary's. The whole distance between Green Bay and Lake Superior presents a delightful tract of country, abounding in all the means of wealth and prosperity. Clear and beautiful lakes, with plenty of large trout and other fish, are found at convenient intervals. Water-power is abundant. The timber, consisting of maple, beech, oak, and pine, is of a superior quality. The land has a sufficient variety of surface, and is susceptible of easy cultivation. A few roads will open this country to the industrious emigrant, and it will soon present the spectacle of villages, schools, mills, cultivated farms, and every industrial pursuit which is now followed in the southern portions of Wisconsin and Michigan.

THE INFLUENCE OF CHEMISTRY ON THE ANIMAL, VEGETABLE, AND MINERAL WORLD.

Dr. Sheridan Muspratt, Professor of Chemistry in the College at Liverpool, and the talented author of several works on the blow-pipe, *Qualitative Analysis for Laboratory Practice*, and numerous chemical treatises, has recently published a pamphlet under the above title. Whoever has read Dr. Muspratt's *Plattner on the Blow-pipe*, or any of his numerous popular publications on the sublime science of chemistry, may at once imagine how capable is such a writer to treat on the influence of chemistry in the physical departments into which the organic and inorganic produce of the world is divided. In the perusal of the short space of about 14 pages, the reader is impressed with astonishment at the extraordinary and extensive operations in which chemistry takes a prominent part, both in the progressive operations of Nature, in the production of vegetable and animal, the great changes gradually, but continuously, in force in the mineral world, and in the researches of man to discover the elements of which these fruits of the earth are composed. The author commences with remarking upon the necessity of a practical knowledge of chemistry, a science which can only be learned in the laboratory: by lectures and books we may obtain an insight into, and a very fair knowledge of, every other science, but with chemistry it is impossible. The most minute *description* of an experiment will not secure the student from encountering the numberless difficulties which present themselves, and which he must learn to subdue, and this is particularly the case with the manufacturing processes, such as soda, sulphuric and other gases, &c. It then proceeds to show that the chemist is not the benefactor of a class, but of nations; drawing from their hiding places the most precious secrets of Nature, and turning them to practical and successful results. As one of the results of chemical synthesis, or the reproduction of any analysed substance—*lapis lazuli* for instance. Gmelin found this splendid azure coloured mineral to consist of silica, alumina, and soda, three colourless bodies, with sulphur, and a trace of iron; here was nothing to account for the colour, but, by making these ingredients up in the proper proportions, the rich delicate tint of nature is produced, and thousands of pounds weight are now annually manufactured. On the benefit of chemistry to agriculture, the author instances the experiments performed by the Rev. Mr. Huxtable, of Sutton Waldron, to solve the problem, can we, by supplying to the soil the constitutents of a plant, cultivate that plant on any land, however barren? He selected five acres of the most barren and unlikely in his neighbourhood, and having made a mixture of the requisite quantity of 5 cwts. of inorganic matter, consisting of potassa, soda, sulphuric acid, phosphoric acid, lime, magnesia, silica, and chlorine, with ammonia and carbonic acid, according to an analysis of the Swede turnip, he produced a crop which exceeded his most sanguine expectations. In the animal kingdom, chemistry has been of equal importance; but the mineral department shows its most rapid strides, and greatest importance, in the vast progress of the arts and manufactures during the last 50 years. The manufacture and consumption of coal gas alone is a wonder, in a commercial point of view. In England, 6,000,000 tons of coals are annually employed for its manufacture; and from 12,000,000*l.* to 15,000,000*l.* expended in its production. In London alone, 500,000 tons are consumed, producing 4,500,000 cubic feet of gas, and 500,000 chaldrons of coke—125,000 chaldrons of which are consumed in heating the retorts, and the remainder sold as fuel. The length of mains in London is 1600 miles, and the capital employed 4,000,000*l.* The manufacture of soda and sulphuric acid are then dwelt upon, the former having been said to be a fair criterion of a nation's civilization, while the latter is certainly a standard of its commercial prosperity: 100,000 tons of the latter are now manufactured in Britain—60,000 tons of which are used in the manufacture of soap and glass. It is also used in the liberation of phosphoric acid from bones, in the manufacture of alum, the sulphates of copper, zinc, and potassa, sulphuric ether, of sugar from starch, in the new refining process, and numerous other chemical commercial operations. The miner and the metallurgist are now continually seeking the assistance of the chemist, and availing themselves of the results of his researches; and that valuable instrument, the blow-pipe, is now an unraveller of some of their most difficult problems. The searching into the works of Nature delights and enlarges the mind, while it leads to the most important and unexpected discoveries, and the benefit of the great human family.

THE ELECTRIC LIGHT.

An interesting and important lecture was delivered by Dr. Bachhoffner, at the Polytechnic Institution, on Saturday evening last, on the nature and properties of the electric light—that gentleman having been requested to explain the details of its character by the members of the "Mutual Gas Fitters' Association," of whom about 300 were present.

Dr. Bachhoffner commenced by stating, that the association (of which he was a member) had not been established for any sordid purposes, or to secure a monopoly, but for disseminating instruction among its members on that important subject—artificial illumination. Notwithstanding that with all the experiments which had been made for the perfect elimination of the electric light it had so far not been practically successful, he considered it might be looked upon at the present day as very much like what gas was in the days of Windsor; and he believed the time was approaching when the talents and practical experience of the "gas fitters" would be called into requisition as "electric light fitters." When gas was first introduced, there were many wise-headed individuals who ridiculed the idea, and said—"pooh!—pooh!—nonsense!"—but a very few years showed the fallacy of their views, and the success of science. The electric light was much in the same position at the present day, and he had no doubt would eventually be perfectly successful. In perfecting new inventions, it was only necessary to follow Nature's laws; and in the case of the electric light Nature worked for us, and the only difficulty to be overcome was a mechanical one, which he had no doubt would be accomplished. The talented lecturer then stated that, in answer to the question—what is electricity?—he could only acknowledge that science was yet very much at fault; by some it was considered a fluid—by others an inherent property of matter; but although, from experience, they perfectly well understood its properties, and the means of applying it to practical purposes, its essential nature was unknown. The sources of electricity were then pointed out—these being friction, magnetism, chemical action, vitality, and heat.

Dr. Bachhoffner then performed several experiments, showing the presence of electricity in paper and other substances, which was elicited by friction, and acted powerfully on the gold leaf electrometer. The difference between vitreous and resinous electricity was then explained, which, by continental experimentors, were supposed to be two distinct fluids, but which, in this country, was still only considered as one, under different positions—positive and negative. He dwelt much on the subject of the composition of water—eight parts by weight of oxygen to one of hydrogen—its decomposition by the voltaic current, which was beautifully proved by the combustion of the hydrogen in one of the glass tubes, and the supporting powers of flame and heat by the oxygen in the other. These experiments, with several others, were shown as explanatory of the powers of electricity generally, rather than to the immediate subject of the light, on which Dr. Bachhoffner described the various forms of battery which had been in use—Wollaston's, Cruickshank's, Daniells', Groves', &c., and stated as his belief that if ever the electric light was practically successful, it would be by a Daniells' battery. The conducting powers of the different metals were then explained in the following order:—Silver, copper, lead, gold, brass, zinc, tin, palladium, iron; and of heat—silver, gold, tin, copper, platinum, iron, lead. The magnetising power of voltaic electricity was then shown on a piece of soft iron, enveloped in an insulated coil of wire, requiring something like 2 tons to overcome its effect; and experiments were performed with different substances as the poles of the battery: copper gave a beautiful green light; iron a yellowish white; zinc a lavender purple; but carbon, and carbon alone, gave a pure light, which, under all circumstances, was similar to sunlight. The carbon best adapted for the electric light was that deposited in gas retorts; and the lecturer said that it was possible the time would arrive when a discovery would be made by which this substance might be converted into plumbago, for it was found, after a current of electricity had passed through it, to be softened, and very similar to that substance.

Dr. Bachhoffner then alluded to Allman's patented arrangement for regulating the distances of the carbon points, and considered that, in an economic point of view, that gentleman had been more successful than any of his compeers. He went into a comparison with the electric light and gas—highly in favour of the former in a sanatary point of view, and concluded a lecture which evidently gave great satisfaction to a most respectable and numerous audience.

CHARCOAL IRON.—An announcement of some importance appears in our advertising columns, relative to the manufacture of charcoal iron. It will be seen that a gentleman in Belgium professes to produce iron by the use of charcoal as fuel, at a price 25 per cent. under what it can be supplied at present in this country. The superiority of iron smelted by charcoal over that obtained by the use of any other fuel is well known, and for the manufacture of steel such iron is peculiarly adapted. The inventor of this peculiar process is confident that it will prove of immense importance to the British Empire, and particularly to the railway interest—iron so manufactured being more lasting than the ordinary kind, and less liable to lamination.

BLACK DIAMONDS FOR THE EXHIBITION.—Another monster block of (anthracite) coal, intended for the Exhibition, has been cut and safely landed at Mr. Kirkwood's, Waunesegurwen Colliery, near Cwm Amman. This block, which weighs nearly four tons, was raised from a pit above 190 yards deep.

A cargo of Warlich's patent fuel is about being shipped from Swansea to California.

Original Correspondence.

ON THE USE OF CAUSTIC LIME, INSTEAD OF LIMESTONE, IN BLAST-FURNACES.

SIR,—It is to be hoped that the old imperfect routine of some of our large manufactories, especially in the production of iron, will be gradually corrected by the diffusion of the chemical and mechanical principles on which the several operations are established. Some time ago you published a short abstract from one of my reports *On the Furnaces and Mills of Prussia, and other Iron Districts on the Continent*, which showed the simplicity and superiority of some of their works, as compared to many of ours, in addition to the operators evincing superior intelligence in the practice and principles of making iron.

The quality of the materials employed, the blast-furnaces and mills, together with the quality of the produce, were duly dwelt on in detail, and the mode adopted for preventing the splitting and bruising of the surface of the rails taking place, which is too often the case with many of our rails, for the want of such precaution in the piles.

With respect to the present question, on the use of caustic lime, instead of limestone, in blast-furnaces, it is evident that there is a considerable advantage in it. Firstly, it acts as a test on the quality of the flux. It ought to be pure limestone; but it often happens that the nearest calcareous formation, or quarry, is impregnated with the silicate of calcium, magnesium, and other impurities. Consequently, when such limestone is thrown into the furnace in a raw state, a portion passes through unchanged, and comes out at the periods of cleaning the hearth, mixed with the slag or scoriæ. This I have frequently witnessed in large furnaces.—Secondly, the previous calcination saves a large amount of fuel, and makes the latter more effective in the smelting process.—Lastly, it purifies the coke more perfectly. This may be easily proved by dipping impure coke into a solution of lime, and employing it for smelting. The pyrites which may exist in the coke is decomposed into a sulphate of lime, and the iron combined with the carbon—in short, a much more perfect decomposition takes place amongst the materials. I am very glad to see the subject taken up, as it must tend to effect some good by introducing economy of materials, simpler arrangements, and a more perfect process in our iron manufactories.

For the want of good early training in the general principles of our mines and smelting establishments amongst the operatives, England is suffering in the extraction and conversion of her internal resources, as well as in the available capital. There is almost an impassable gulf between the practical man who has been bred and reared in the mines, smelting-works, or workshop, and the man of science who has been educated in the academy or university. The uneducated practical man, when once he has acquired a certain routine, is a valuable and indispensable instrument to the welfare of an establishment; and such men, under the guidance of prudent and intelligent men of science, lead to improvements and beneficial results. But should the person placed in charge be filled with doctrines founded on assumptions, and who never descended to the mechanical drudgery of experimental inquiry to acquire practical knowledge, and who may regard the mere practical man as a person beneath his notice, he cannot but soon bring ruin on an establishment.

Again, we have another drawback, which, to my knowledge, has been the cause of ruin to some establishments carried on by Englishmen—viz.: the appointment of persons to take charge who may be very good accountants, and plausible writers, but possessing little knowledge in the management of men, or of the work which may be placed under their superintendence. It is true that, in a well-regulated concern, a steady man of business is preferable to a loose irregular manager, if he exercises his judgment in the operations with discretion; but if, on the contrary, he becomes opinionated, keeps on the routine by elevating the ordinary practical men above their proper position, and encourages them in old contracted notions, in opposition to all improvements which do not emanate from himself, and working in the dark by the rule of thumb without plans or principles, it is clearly evident that the mere accident of natural favourable circumstances alone can render such proceedings permanently successful. These are of everyday occurrence abroad, as well as in the United Kingdom; and can only be removed by the diffusion of useful knowledge, and the elucidation of the general principles connected with our national industry.—EVAN HOPKINS: *Austinfriars, Jan.* 28.

ATMOSPHERIC INFLUENCES, &c.

SIR,—I am afraid your correspondent, Mr. Coxworthy, is committing, and intends to continue to commit, a sad havoc in the natural order of our rocks. I have been much pleased with many passages in his papers on "Electric Condition," and with some of his observations; but it appears to me, from what I can learn in your last Number respecting the formation of granite, and then the assumed great calcareous precipitated coating in which he thinks our mineral wealth is found, that he is getting beyond his depth, for the want of actual observation, and the study of such questions in the field. There can be no objection to any hypothesis, provided it does not go beyond the boundary of inductive philosophy and actual facts; but, on the other hand, such as are contrary to existing laws and characteristic effects, cannot be tolerated by observing men of science. They will share the same fate as the doctrines of pyrogen; they stand on perishable and only imaginary basis, and must, therefore, be swept away in the progress of truth.

I trust Mr. Coxworthy is too much of a philosopher to take offence, when I recommend him to study well the real character of our rocks before he begins to theorise on their origin. In the study of Nature, all preconceived ideas must be removed, and the mind ever be in waiting attitude, ready to receive the evidence of phenomena, whether they contradict or support the theories which have been adopted. It was proved in the time of Coulomb that the magnetic force with which the repulsion of the etherial or gaseous atoms, and the attractions of the material molecules are produced, is identical to that power we call gravitation in its law of acting—viz.: the inverse ratio of the square of the distance. The question has been lately revived, and further proved, that magnetism, galvanism, electricity, &c., are mere different effects, produced by the same cause. It is not the collector of isolated facts in experimental inquiry who can give the character of a country, and theorise on the problematic causes from which it originated; it is he who has traced the connection of its parts, and from an eminence surveyed its outlines, and marked its actual features and internal conditions. When the mind has been enlightened by the perception of a great bond of unity, it may then return to the dark and barren waste over which it had been hovering; and by the guidance of the torch of inductive philosophy may embrace, under the comprehensive grasp of general principles, the multifarious and isolated phenomena, which heretofore had neither value nor connection. He alone who, in the general pursuit of knowledge, has cultivated that spirit of strict and careful generalisation which enables him to perceive the relations of different phenomena, will be best able to determine the character and influence of the immutable laws and order of Nature. EVAN HOPKINS.

Austinfriars, Jan. 28.

WESTON'S NOVO-MOTIVE SYSTEM OF RAILWAY PROPULSION.

SIR,—I am requested by the "British Inventors' Protecting Company" to thank you for the full and very satisfactory explanation, given in your paper of last Saturday, of Mr. Weston's novo-motive system of railway propulsion, as well as the exposure of the defects of the old exploded arrangements, by which the atmospheric principle was attempted to be reduced to practice. The comparison of the "locomotive engine" with the "novo-motive" is equally—nay, even more—advantageous for the latter, the principal features of which may be stated in the following proposal, to test their respective merits during the forthcoming Exhibition.

An offer to the manufacturers of locomotive engines:—1. It is proposed to lay down, or use, the rails of any railroad near London, parallel lines of rails, for any length that may be agreed to by the respective competitors. —2. It is proposed that Weston's "novo-motive" shall occupy the one set of rails, and the locomotive the other, to test their respective merits, as to cost, safety, power, and speed.—3. Mr. Weston undertakes to demonstrate that, by his system, he can carry a load of passengers on a steep gradient, up which the locomotive cannot propel itself and tender.—4. That the novo-motive will also start with its load, and arrive at its destination in a shorter time than the locomotive; or stop and reverse the train when going at full speed, or any speed, in half the time required by the locomotive, and without using any wheel breaks, which are so destructive to the locomotive and rails.—5. That the cost of working the novo-motive will not exceed half the cost of the locomotive; while the comfort and safety of the passengers will be greatly increased, and the cost of railway travelling reduced.

There are many other points to which I might refer; but enough has

been said now to induce some of your readers to examine the matter, and promote the comparison, so much required for the public benefit. I will only add that the novo-motive system is admirably adapted to the conveyance of passenger traffic over the principal streets and thoroughfares of the metropolis, and other large cities and towns.

Aldermanbury, Jan. 28. ——— ALEX. CAMPBELL, Sec.

IMPROVEMENTS IN THE MANUFACTURE OF FUEL.

SIR,—I perceive a paragraph in your paper of the 25th Jan., referring to a new fuel just brought out. As a disinterested party, it seems to me to wear rather a partial appearance, and I think, in justice to the old manufacturers, a passing remark ought to be made; and, as an example, I may name the largest makers—viz.: the company manufacturing under Warlich's patent. This description of fuel has stood the test of years, and I must confess that I consider it unfair and premature to presume that this embryo fuel, as I may so term it, is superior to Warlich's, or any other. It has not been used as yet; this I know from good authority: in fact, the patentee has at this time no works erected, and, consequently, its superiority cannot possibly be properly proved. It must have a trial before the result can be known; and has this been done? In reference to the remark, that no two cargoes of fuel are of the same quality, I should suppose the quality of all fuel depends on the material (the coal). The machinery and manipulation being the same, why cannot any quantity of blocks, manufactured under the same patent, and of the same description of coals, be precisely the same quality? It appears to me so self-evident, that no one can reasonably doubt it. I trust you will excuse my entering on this topic, but being interested in trade, and desirous of seeing all kinds of business carried on in a fair and impartial manner, I really cannot refrain from so doing.—A CONSTANT READER: *Swansea, Jan.* 29.

THE COPPER TRADE.

SIR,—I regret to find that Mr. G. R. Williams's comments upon my letter of the 16th inst. are neither candid nor accurate. I trust, however, that Mr. Williams will now see that I do not make statements that I am unprepared to prove; and equally ready to admit an error if I commit one. As regards my ideas on free trade, I dare say there is not much difference between us; if anything, it would be that I believe we ought, considering our enormous debt, and the vast benefits that would accrue to the Mother country and the colonies, to have begun free trade with the colonies; but our monstrous patch-work system of taxation having paved the way for a comparatively clean sweep of all obstructions to commerce, I am ready to admit, with him, that it is yielding, in many instances, most excellent fruit. It however, appeared to me, prior to the great reduction of the duties upon copper and its ores, in 1848, that the waste arising from the present process of smelting copper in this country would, by the very loss of large quantities of valuable ingredients of the Cornish ores, lead not only to a greatly increased importation, but increased home consumption of foreign copper. But here Mr. Williams and I join issue; for he says, in neither very correct nor courteous terms, "because, forsooth, the imports of copper have increased in the two last years, and that the last year's returns exhibited the astounding amount of 2838 tons, and manufactured goods to the tune of 25,338*l.* Your correspondent most unfairly takes care not to mention the fact that this foreign copper is to a very small extent held for home consumption." We shall see. In turning to the "Trade and Navigation" returns now before me, I find that the imports of merely unwrought and part wrought copper in 1849 were 44,114 cwts., of which 41,073 cwts. were entered for home consumption, and in the 11 months of 1850, ending the 5th of last December, there were no less than 84,770 cwts. of such copper imported, and as much as 75,849 cwts. entered for home consumption. So much for Mr. Williams's idea "that this foreign copper is to a very small extent held for home consumption." Indeed, if I had not thought my referring to the prodigious increase in the home consumption would have made my former letter too long, I should certainly have quoted these figures.

But Mr. Williams will oblige me to point out in my letter the words which he ventures to place for me in inverted commas, thus, "the copper trade of England is becoming of very little importance." The only words he could possibly twist to that quotation are, "so great a revolution is taking place in this trade as to justify a few remarks, ere the English copper trade is reduced to very little importance, in comparison to the copper produce of other countries." I have cause, therefore, to say it is not just, his making an assertion for me which was only conditional, which, so far as it goes, seems to be borne out by the above large importations, and other signs in the horizon. And only let him here call to mind the state of the British zinc trade, and who has "elbowed" us out of that, with a vengeance.

I must now say your correspondent has been looking at the mining table very inattentively, or I trust he could not have written that I have taken the highest productive year and compared it with the lowest. For he will find, by referring again to the table, that in the year ending the 30th June, 1836, no less than 957,752*l.* worth of copper ore was raised, which is upwards of 25,000*l.* more than what he considers the maximum, and which he supposed I had taken to institute a comparison. Now, i I had compared the year ending 30th June, 1836, with the year ending 30th June, 1849, I should then have arrived at the result that the falling off was no less than 239,835*l.*, or 25 per cent.! After these observations, perhaps your correspondent's judgment will lead him to conclude that I have compared the produce of the year ending 30th June, 1839, with the tenth year, ending the 30th June, 1849, because of the Cornish miners constantly referring to the mining year ending 30th June. I have compared the exports of copper from Chili for the year ending Dec. 31, 1839, with those of the year ending Dec. 31, 1849, also a period of 10 years, as these exports were the latest I could refer to; and here we perceive how progressive is the copper trade of Chili compared with the English copper trade, since the exports of copper from Chili in 1839 were only 2267 tons, while they rose to 9000 tons in 1849, or an increase of nearly 400 per cent. in the 10 years; yet I believe there is looming in the horizon a far more formidable cloud. For instance, the exports of South Australia alone in the six months ending 30th June, 1850, were 700 tons of copper; while in the corresponding six months of 1849 (misprinted 1842 in my last letter) they were only 35 tons, or, according to another account, 42 tons—an increase in that short space of time of at least 1600 per cent.; and it cannot be forgotten that of the exports of copper from South Australia very little had arrived last year in the United Kingdom. Not so with respect to India; there the increase was considerable, and which has produced dull and lowering markets. Thus we see the statement made on the 18th April, 1849, by the directors of the Burra Burra Mining Company to the shareholders, to the effect that "from the establishment of smelting-works in this province, and in Sydney, the shipment of ores to Britain will be very much diminished, if not altogether abandoned, and the increased profits arising from the sale of the ores within the province, will be considerable," is fast being realised. Since then a smelting establishment is in full operation, which alone is said to turn out 50 tons of fine copper per week; and I need not go further than allude to the fact that our brethren in North America are not only smelting copper, but converting it into sheets, and other articles of utility, and who will soon render themselves as independent of English copper as they did of British lead, till a newly-discovered process here for desilvering the lead, and till the miners at Galena, in the States, with the enterprise peculiar to their countrymen, scampered off to California, to reap a golden harvest there, when these two fortunate discoveries enabled us to ship to the United States in 1849 no less than 5300 tons of British lead, in place of 1 ton in the previous year. In truth, the advantages which arise from early introducing into a country improvements in smelting, or anything else, might be well illustrated by the history of the lead trade.

It has been deeply impressed upon my mind, from practical experience, that not only a vast deal of the ingredients of the Cornish copper ores might be profitably manufactured, but many chemical manufactories might be started in the county to turn to account its great natural capabilities. And sure I am, if only a tenth-part of what has been frittered away in railway litigation in Devon and Cornwall had been assigned to the advancement of the best interests of those counties—viz., the establishment of a mining school, or the advancement of education, as it is so admirably extended in the States of New York and Philadelphia, together with the establishment of smelting and chemical works, the prospect of the miner would have been very encouraging. For is it not absurd to think that now when foreign sulphur fetches 9*l.* 10*s.* per ton, that in the county where the finest iron pyrites are raised in abundance from the mines, and capable of making the best vitriol, little or none of it is used; whereas we have only to refer to the imports at Liverpool for the week ending the 21st Jan., to find that 345 tons of sulphur ore (iron pyrites) were imported from Ireland into Liverpool for the use of the chemical manufactories of that neighbourhood.

In conclusion, I am not one to lose hope where there is reason to entertain it, but I confess the infatuation of your correspondent, after reading your Journal of Jan. 18, is very remarkable, inasmuch as the report of the last half-yearly meeting of the Burra Burra Mining Company, which that number contained, shows that that mine alone, in the year ending the 30th of next March, is not unlikely to yield more copper than half the mines of Devon and Cornwall. However, it may be that Mr. Williams would *taboo* the subject; but "forewarned is to be forearmed" is a proverb of great importance at all times, and never more than now to the Cornish miner, when few persons can doubt but that a radical change is fast, yet silently, coming over the copper trade of England. Let, then, the people of the west shake off the incubus which they have borne so long, still not forgetting the fallacious statements about railways contiguous to the sea yielding a profit, notwithstanding a cost of 35,000*l.* per mile, and from which they have suffered so much, and, therefore, examine well whether something cannot be accomplished to retrieve their mining prospects, ere it be too late.—WILLIAM BIRKMYRE: *Jan.* 27.

SODA BY A NEW PROCESS—A WARNING.

SIR,—I fear the last half-year has been the commencement, and that the present year will see still more the vanity of many grand schemes imported direct from France, Belgium, Holland, and parts abroad, for the aggrandisement of John Bull, at the smallest possible cost! Whether or not the statement I am now about to make partakes of this character, I am not yet fully prepared to state, but trust that any of your readers who can at all enlighten me on the matter will not fail to do so, as well for private as for public good. A party in town lately purchased from the inventor, a person about 60 years of age, who professed to be a doctor of philosophy, resident at Amsterdam, an interest in his reputed discovery of a new economical process for obtaining soda from common salt, applicable to the largest scale of manufacture—the terms agreed to being that it was to be, in the first instance, a secret communication, and then that a stated cash payment should be made to cover travelling expenses, it being also stipulated that the agreement to patent the invention was to become void, and the money repaid, should a trial of the process prove unsuccessful. The result of a series of carefully conducted experiments, each occupying one week, only served to prove the inefficiency of the new method for any manufacturing purposes. During the last two months the inventor has been twice written to by post; the first letter was *unanswered*, the second was *returned*, with numerous endorsements, and opened by the Post-office authorities, it appearing that the doctor is no longer to be found in Amsterdam. Now, this circumstance, coupled with his showing no anxiety, after a lapse of six months, to realise the large income he calculated on receiving from the contemplated patents, the palpable insufficiency of his scheme for any practical purposes, although chemically correct in theory, yet not productive of the *paying quantity*, and his apparent intimacy with Leamington, Droitwich, and the salt districts, all tend to awaken suspicion; therefore, the object of this inquiry is to discover whether any other party has been deluded by the same scheme and the same tempting offers, and seemingly fair and moderate terms, and, if so, to seek redress accordingly.—PLAIN DEALER: *London, Jan.* 27.

MATERIALS FOR PAPER.

SIR,—It is said M. Adolphe Roque has manufactured paper from the fibres of the bannana and aloe. No true aloe will yield adequate fibres; but I presume the *agane* is confounded with the aloe. The bannana is the fruit of the *musa paradisiaca*. Upwards of 12 years ago I had paper made from the *musa textilis*. It was very beautiful, and resembled India paper. I also published a work on *Phormium tenax*, printed on paper made from its own leaves, which I had manufactured for the purpose.

Broadstone, Stranraer, Jan. 27. ——— J. MURRAY.

THE "AMERICAN CHURN."

SIR,—When I incidentally referred to the "American churn," I did not certainly imagine it would prove a convenient peg whereon to hang an *advertisement*. I referred to its *simplicity*, but expressly said that this was no subject of complaint. Its expense seemed *to me* most extravagant, as I should have imagined that the one pointed out to me, and the price of which I was informed was 30*s.*, might have been made anywhere for 10*s.* This, however, was my own estimate, and might be wrong. I am, Mr. Editor, a very simple-minded man, and it naturally occurred to me that there might be an endeavour to make the most of it. I was a stranger to the question of *sale*—that was expressed by another, not by me. Sale has a relation to locality, and chiefly in this case, as far as demand is implied, has to do with dairy districts. I had heard of the "American churn," and availed myself of the opportunity to judge for myself. I acknowledge I was surprised at its simplicity—*hinc illæ lachrymæ*. The assumed success of its *modus operandi* I know nothing about.—J. MURRAY: *Jan.* 29.

DAVY'S SAFETY LAMP.

SIR,—It is very far from my wish to engage in controversy with Mr. Lake on the subject he has referred to, seeing the worthy author of the "Clanny lamp" has descended to the grave of his fathers. All that I shall, therefore, say is, that the statement of Davy's safety-lamp being an *imitation* of the "Clanny lamp," is *entirely new* to me, as I had, in my simplicity, supposed that the wick flame in the "Clanny lamp" was supplied with air by descending currents from above, as in the Muesseler lamp.

Broadstone, Stranraer, Jan. 29. ——— J. MURRAY.

ARTESIAN WELL AT SOUTHAMPTON.

SIR,—It appears, by your Journal of Saturday last, that the boring of the Artesian well at Southampton is stopped; but the reason is not stated. It may, perhaps, be useful to know that the progress of the Artesian well at Portsea was in danger of being stopped from an eminent geologist having decided that there was little or no chance of getting a proper supply of water. One of the subordinates, however, insisted so strongly against this measure, on the ground that the appearances were favourable, that operations were allowed to proceed for a little time longer. The result was an abundant supply of water; and a raised tank is now nearly completed whence it will be conveyed to different public establishments.

Portsmouth, Jan. 28. ——— JOHN J. LAKE.

STEAM-BOATS FIFTY MILES AN HOUR—PATENT LAWS.

SIR,—You have on many occasions of late shown yourself the poor man's friend in making your scientific Journal the advocate of genius—in deprecating with success the present system of organised injudicious taxation imposed upon talent, by the heavy expenses attendant on the necessity of securing your invention by patent right. How this burthensome taxation affects individuals has been repeatedly demonstrated. How it may affect the public at large, I will here state a case to add to the catalogue of incongruities existing of laws passed for the protection of talent, diverted, by misuse, to the stifling of works of genius—the inventor throttled by protection laws—the public good crushed by individual pelf. Were the proposed law passed of a 5*l.* note giving an inventor a claim of right for one twelvemonth, the following case of novel invention might give a great impetus to steam improvements and steam navigation; but as the law now stands, with all its incumbrances, this novelty must remain dead to the world. Steam mechanism has been carried to the highest pitch of science. Upon the present existing system, the talent of Europe and America has been devoted towards carrying it out, and well have they laboured and surpassed the anticipations of former years; and well it may be said it would be next to impossible to carry improvement further. As resistance increases with celerity, so we must remain content with the wondrous feat of a reliance upon being able in all probability to cross the Atlantic in 14 days; and when I affirm that I could effect the same object, and go the same distance, in one-third or one-fourth of the time, I must be content to remain under the impeachment of folly or wilful deception. I am in the position of many other inventors. I have an important secret which I dare not disclose, and cannot afford to purchase its safety; then this secret must die with me; and however useful this invention might have proved to society and the world at large, it must be lost, because I have not several hundred pounds to spare, or a capitalist to back me, to launch it into the world.

The power of effecting the desirable object of travelling by water nearly at the same rate that is done by land, I am perfectly convinced of that I possess; but to effect this object, I do not follow in the wake of former men of science, whose great consideration is to carry out practices hitherto in use—to improve upon excellence, and gain by great mechanical science an improved half-mile in every hour. My inspiration has been to take a start in another direction, and seek by other means to obtain the desired object. And I will assert that, though under a first and rough organisation, I will go much beyond the present rate, laying the foundation for men of science in the art to carry out steam navigation to the extent of 50 or 80 miles the hour, without dependance upon wind or currents, that can give no aid after a certain rate of action. That this unusual operation is to be effected by novel means, I am convinced of; and, by your inserting this letter in your widely-read Journal, it may open the eyes of intellectual persons in both hemispheres, make them look about, and something good may come of it; but they must not wear out their senses in conjectures how to increase power, as we have enough of that; but how to turn that power to advantage. As a preliminary, I do not use paddle-wheels (though paddle-wheels may be made use of), but propellers, divested of back water; nor do I make use of sails, which could but seldom be found efficacious when going at a rapid rate. I must wait for the re-organisation of the Patent Laws to disclose the rest. By bringing this letter before the public, you will add one more act of kindness towards the poor man of genius, as giving another evidence to the many already produced of the injurious tendency of our present Patent Laws. J. BROWNE.

Great Portland-street, Jan. 28. ———

MR. ROUND'S WONDERFUL FLAT ROPE.

SIR,—For more than a quarter of a century I have been intimately connected with the mining interest, and have paid much attention to the strength and durability of various materials used in mines. In the use of rope, we have always acted on the supposition that any shroud-laid rope, of 7 in. or more in circumference, will, with perfect safety, and without the slightest injury to the rope itself, lift 1 ton for each inch of its circumference—in other words, a 7-in. circumference rope will lift 7 tons without risk. This rope would require 309 threads of rope yarn to make it; a 5½-in. flat rope would require 648 threads of the same size yarns (18) to make the four shroud-laid ropes of which it is composed, and, in addition (say) 15 threads of fine sewing yarn to sew these four ropes together, and keep them flat. *Six hundred and sixty-three threads* of rope yarn put together, in the strongest form possible, for what?—To lift the ENORMOUS WEIGHT OF FIVE TONS! A piece of a ship's ratline, only 1 in. in circumference, supporting a spider, instead of its own gossamer webb; and, strange to say, the ratline does not break, and is not even injured! That is a Staffordshire, or, at the very least, a "Round," wonder; and, in common justice, not to one, but to all, the circumstance should be known.

Mr. Round is, I am told, a very intelligent and highly-respectable gentleman. Notwithstanding, it is quite evident that he knows nothing whatever of the subject on which he writes—viz.: "the strength of ropes." For his benefit, and that of those who may be equally ignorant on the subject, I have laid down a very safe rule:—200 yards of 5½-in. flat rope is both heavier and stronger than 200 yards of 10-in. shroud-laid rope. If Mr. Round never suffers his people to put more than 10 tons in either of these size ropes, he need be under no apprehension as to the ropes breaking, whether the weight be suspended for three minutes, three hours, or three days. According to the old rule for ascertaining the strength of ropes, laid down by Dr. Robison, which appears to be confirmed by the experiments of Duhamel, Desaguliers, Chapman, Coulomb, and others, a rope of 10-in. circumference should carry 20 tons. The rule I have laid down is, however, best, because it leaves "a long range" for contingencies—such as friction on going over pullies, &c. OBSERVER.

Plymouth, Jan. 27, 1851.

New Patents.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

S. Morand, of Manchester, for improvements in apparatus used when stretching and drying fabrics.

B. Woodcroft, of Furnival's-inn, for improvements in machinery for propelling.

J. Murdoch, of Staple-inn, Middlesex, for certain improvements in preserving animal and vegetable substances.

C. G. Kurd, of Paris, France, engineer, and Charles Alexis de Wendle, ironmaster, also of Paris, for improvements in the process and instruments to be used for boring the earth, and sinking shafts of any given diameter, for mining and other purposes, and in the means of lining such shafts.

A. V. Newton, of Chancery-lane, Middlesex, mechanical draughtsman, for improvements in manufacturing looped and other woven fabrics.

R. Johnson, of Manchester, wire-drawer, for certain improvements in annealing articles of iron and other materials.

J. N. Aderno, of Golden-square, Middlesex, gentleman, for improvements in the construction of maps and globes, and in apparatus for mounting the same.

C. Marsden, of Kingsland-road, Middlesex, engineer, improvements in boots and shoes.

G. Bradshaw, of Bishopsgate-street Within, London, hosier, for certain improvements in fastenings for garments.

J. P. Gage, of Paris, France, chemist, for improved chemical compounds for tissue bandages, wafers, and also for surgical purposes.

D. Davies, of Wigmore-street, Cavendish-square, Middlesex, coach maker, for certain improvements in the construction of wheel carriages and in appendages thereto.

J. D. M. Stirling, Esq., of Black Grange, North Britain, for improvements in the manufacture of metallic sheets, and coating metals, in metallic compounds, and in welding.

J. Crossley, of Halifax, for improvements in the manufacture of carpets, rugs, and other fabrics.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

S. Weil and S. Flattan, Mile-end, sock (for infants).

J. Hawkins, Walsall, bit for horses.—R. M. Vick, Gloucester, hames.

P. R. Jackson, Salford Rolling Mills, near Manchester, stink trap.

W. Pulford, Boston, archimedian nut-cracker.

W. Butterworth, and Co., Great Dover-street, Southwark, elastic boot legging.

W. Mont, Hammersmith, fiddle bow.—A. Graham, Glasgow, gas cooking range.

B., E., and W. Barling, High street, Camden-town, catch top mount for smoking pipes, and other articles of manufacture.—*Mechanics' Magazine.*

METAL CASKS.—Mrs. Brown, Long-lane, Bermondsey, has patented some improvements in the manufacture of metallic casks and vessels, which consist in securing the heads of metallic casks, and the bottom of cans or other vessels, and in making joints in such casks and vessels, by bringing the meeting or overlapping parts under the operation of suitably formed rollers, by which the two thicknesses of metal are corrugated together. The ridge of the one corrugation fits into the concavity of the other, and thus not only is the use of rivets dispensed with, but additional strength imparted to the portion of the casks or vessels so treated. When the joint is required to be fluid-tight, it must be soldered in the usual manner. One corrugation only is shown and described in the specification, but the patentee remarks that a greater number may, of course if desired, be made use of. *Claim.*—Causing the heads of casks and bottoms of vessels to be secured, and parts of iron vessels to be joined by corrugating the two thicknesses of metal.

BIRAM'S PATENT ANEMOMETER, FOR MEASURING THE CURRENT OF AIR IN MINES, &c.

This INSTRUMENT is CONSTRUCTED so that the ACTION of a CURRENT of AIR on EVERY PART of the VANES may tend to PRODUCE a REVOLUTION of the WHEEL in the same time—the number of feet lineal which have passed through the wheel being shown by indices which revolve on the dial-plate underneath the handle.

Further particulars, with references, may be had on application to the patentee.

37

BIRAM'S MINER'S LAMP,

COMBINING LIGHT, SAFETY, AND ECONOMY.

The PATENTEE respectfully solicits the attention and patronage of COAL PROPRIETORS to the above LAMP—the LIGHT from which will be found FOURFOLD that of the Davy Lamp—the SAFETY SUPERIOR, and the COST IN OIL not ONE-HALF the expense of candles, even when burning free from draft; whilst, from the light being shielded from the wind, a current of air, inadmissable where naked candles are used, may be passed through the galleries of a mine without inconvenience.

Wentworth, near Rotherham. BEN. BIRAM.

IMPROVED LIFTING JACKS,

MANUFACTURED BY

W. AND J. GALLOWAY,

PATENT RIVET WORKS,

MANCHESTER.

The attention of parties who employ

Lifting Jacks,

is respectfully requested to the superiority of those annexed, over those hitherto in use.

IMPROVED RATCHET JACK.

A

HALEY'S PATENT LIFTING JACK.

38

NOTICE.—The CHIEF PROPRIETORS of the
ROCKS AND TREVERBYN UNITED TIN MINES,
GREAT WHEAL BADDERN TIN AND LEAD,
PENDARVES AND ST. AUBYN CONSOLS TIN AND COPPER,—and
UNITY CONSOLS TIN AND COPPER,—in the county of CORNWALL,
Having their OFFICE at No. 51, KING-STREET, MANCHESTER, beg leave to acquaint the Public, that they have
OPENED OFFICES at No. 55, OLD BROAD-STREET, LONDON,
For the purpose of FORMING a METROPOLITAN CONNECTION with SELECT PARTIES, who alone will be received.
For particulars apply to W. W. TERRINGTON, Secretary.
No. 55, Old Broad-street, City.—January 30, 1851. 39

MR. W. BIRDSEY, MINING AGENT, begs to acquaint his Friends and the Public, that he has OFFICES at No. 1, ST. MICHAEL'S-ALLEY, CORNHILL, and takes this opportunity to thank them for the favours he has hitherto received. From an extensive experience in MINING PROPERTY, in which he has been engaged upwards of 20 years, Mr. Birdsey flatters himself he will be enabled to give much general information—he having personally visited most of the mines in Cornwall.—Mr. BIRDSEY trusts, by strict attention to the interests of those who may honour him with their confidence, to merit a continuance of their orders. 40

MINING AGENCY.—The SUBSCRIBERS respectfully intimate, that their old and extensive CONNECTIONS afford them peculiar FACILITIES for EFFECTING SALES or PURCHASES of MINING SHARES with the utmost promptitude, and upon the best possible terms. They also beg it to be distinctly understood, that considering it to be incompatible with their duties as agents to speculate upon their own account, they have determined to adhere exclusively to a legitimate commission business. ESTABLISHED 1839. JAMES S. TRIPP & CO.
Lombard-street Chambers, No. 33, Clement's-lane, City. 41

MINING OFFICES, ST. MICHAEL'S CHAMBERS,
ST. MICHAEL'S ALLEY, CORNHILL, LONDON.
Mr. R. TRIPP, MINING AGENT, has FOR SALE SHARES in most of the best DIVIDEND-PAYING MINES—including Devon Consols, South Caradon, North Pool, Caradon, Wheal Mary Ann, Botallack, Wheal Margaret, Bedford United, Alfred Consols, Wheal Tremayne, Wellington Consols, &c. Also in new ones, having present and prospective advantages; and is a PURCHASER of Treviskey and Barrier, Trelawny, Wheal Carpenter, &c. &c. 42

MINING SHARES.—Mr. JOHN CREFT, No. 1, ROYAL EXCHANGE-BUILDINGS, LONDON, OFFERS his SERVICES, ON COMMISSION, to BUY and SELL MINING SHARES, and will select for capitalists those with the greatest chance of success, and take pleasure in furnishing a list of prices, together with all particulars. 43

MINING OFFICES,—48, THREADNEEDLE-STREET, LONDON.—Messrs. THOS. FULLER & CO., beg respectfully to call the attention of CAPITALISTS to MINING, as being the most SAFE and PROFITABLE MEDIUM of INVESTMENT, and are in a position to BUY and SELL in all the DIVIDEND-PAYING MINES, and have on hand several other Mines, which will insure to capitalists the most safe investment, and will pay from 15 to 30 per cent. 44

MINES.—MOLYNEUX & CO., 6, FINSBURY-PLACE SOUTH, and 6, WEST-STREET, FINSBURY-CIRCUS, have SHARES FOR SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to capitalists the safest and most unexceptionable investment.—Office hours from Ten to Five o'clock. 45

MESSRS. TREVARTON AND CO., MINING SHARE DEALERS AND BROKERS,
5, *ST. JAMES'S-STREET, PALL-MALL, LONDON.* 46

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—At a Half-yearly General Meeting of the proprietors of the Association, held at the offices of the Company, 26, Austinfriars, this 28th day of January, 1851,
RUSSELL ELLICE, Esq. (Chairman), in the chair,
The advertisement convening the meeting having been read, the following report was read:—
REPORT.
As usual at this period of the year, the Directors have now to furnish the proprietors with a statement of the operations of the past year, as far as the same can be made up, and in conformity with the Deed of Settlement, at the close of the meeting a ballot will be held for the election of two Directors and one Auditor, in lieu of those who now go out of office.
From the accounts now laid before you, it appears that the ore raised up to the 30th November last amounted to 16,266 tons, which is somewhat less than the quantity raised to the same time in the preceding year. That lessened quantity, the directors are happy to say, has been compensated for by an improvement in the quality of the ore—the produce of copper in the ore, in 1849, having been about 17½ per cent., that of 1850, as far as ascertained, exceeds 19 per cent.
The ore also at public ticketing has fetched a fair price, so that the directors are enabled, from the balance of the account now produced, to declare a dividend of £3 per share, payable on and after the 25th of February next.
The falling off in the produce has arisen chiefly from two causes—a reduction in the effective strength of the miners, and heavy rains. The rains in Cuba this season have been rather of unusual severity and duration, so that the working of the mines was impeded by the superabundance of water; at the same time a considerable number of the Europeans were invalided and returned home, and the agents were not able to get an adequate supply of native labourers. The directors, however, have sent out some men, and more are now preparing to follow, so that the agents hope, when the additional hands arrive, to raise as much ore as before. At the same time it may be proper to observe, that the workings in some of the mines have now reached a considerable depth, and new machinery is going out to increase the steam-power, so that any great increase in the quantity of ore may not be expected, in consequence of the greater difficulty in raising it. The Company, however, has some other adjoining mines that have not lately been worked, and from which the directors have considerable expectations at a future time.
The proprietors have been informed from time to time of the contract with Mr. Bankart for smelting copper. During the progress of that contract, whilst ores are being delivered, and copper received back, afterwards to be sold, a satisfactory account of these operations cannot be furnished; but Mr. Bankart is now delivering 10 tons of copper weekly, and previously to the next meeting, in July, the contract will be terminated, and an exact statement of its results will be laid before the proprietors. Though profit may not have attended it, the directors believe that its tendencies and results have been beneficial to the company.
The two Directors who now go out by rotation are Sir John Pirie, Bart., and George Whitmore, Esq., and the Auditor, Francis Mills, Esq., and they are all candidates for re-election.

It was then moved, seconded, and carried unanimously,—
That the report now read be received and adopted.
That the best thanks of the proprietors are due, and are hereby tendered, to the Chairman and Directors, for their efficient management, to which the prosperous results of the Company's operations are mainly due.
The Chairman having acknowledged the compliment on behalf of himself and his colleagues, the proprietors proceeded to the ballot, when Sir John Pirie, Bart., and George Whitmore, Esq., were re-elected Directors; and Francis Mills, Esq., an Auditor of the Company.—The meeting then separated. 47

LANIVET CONSOLS COPPER MINING COMPANY—
BODMIN, CORNWALL.
CONDUCTED UPON THE COST-BOOK SYSTEM.
Capital £10,000, in 10,000 shares, of £1 each, fully paid up—thus affording ample means for the complete and rapid development of this valuable mine, and avoiding all liabilities, present or future.
BANKERS.
Messrs. Williams, Deacon, and Co., London.
This undertaking may be considered as an adventure achieved—the mine having already been proved to a considerable depth, and £27,000 worth of copper ore raised therefrom within a few years of imperfect and partial working, realising a profit equal to 25 per cent. upon the now proposed capital during part of that period.
The lodes are numerous and of great width, carrying the most splendid gossan, and are located in the old clay-slate at the foot of a granite range, the strata which has invariably produced the largest amount of mineral wealth.
Amongst the many advantages secured to the adventurers may be enumerated:—1. The small amount of dues, being full one-third below the average.—2. The extent of level already driven (exceeding 1½ mile in length), and the depth to which the working shafts have been sunk.—3. The courses of ore already discovered, from which profitable returns will be made as soon as the water is drained off.
Applications for shares to be made to Mr. Thos. Allsop, stock and sharebroker, No. 1, Royal Exchange-buildings, London; Mr. R. Bray, town clerk, Bodmin; or to the following brokers:—Mr. J. Davis, 38, Tower-buildings, Liverpool; Mr. E. Speakman, Exchange Chambers, Manchester; Mr. J. Ironside, Sheffield; Mr. C. Beardshaw, Leeds; Mr. Tatham, Middle Pavement, Nottingham—of whom prospectuses and forms of application for shares may be obtained.
The allotment will take place immediately after the close of the share list, and a notification thereupon made to each applicant. 48

SILVER VALLEY AND WHEAL BROTHERS MINING COMPANY,—CALSTOCK, CORNWALL.
In 10,000 shares, of £1 each—all paid up.—Scrip Certificates will be issued, by which shareholders will be secured from any liability.
ON THE COST-BOOK PRINCIPLE.
COMMITTEE.
S. W. DAUKES, Esq., 14, Whitehall-place, Westminster.
GEORGE TATE, Esq., Fulham.
J. W. WELBORNE, Esq., 38, Albemarle-street, Piccadilly.
(With power to add to their number.)
BANKERS—Messrs. Barnett, Hoare, and Co.
SECRETARY—Mr. William Lee.
OFFICES OF THE COMPANY—3, HATTON-COURT, THREADNEEDLE-STREET.
These celebrated mines, now resumed, offer no ordinary attraction as a certain and valuable investment by exploring the silver lode—the twentieth part of which has not yet been seen, and a wide field is open for searching the tin and copper lodes in the sett, which have indications and prospects of a highly encouraging nature.
In 1835 and 1836 rich silver ores were raised, which by assay produced from 200 to 3000 ounces of silver in the ton; some of the ores were sold at 20s. the pound weight. At one period £2000 worth of silver was raised in a fortnight, by the labour of six men only; and at another, ores to the value of £5800 were raised and sold at a cost of £1592.
Dividends, amounting to £1500 a month, for several months, were paid on a capital of £500, and the shares of £5 each were sold at £1100.
About this time it became necessary to erect a steam-engine to drain the mine, for which no funds had been reserved; a call was, therefore, made, but in consequence of expensive litigation and dispute between the shareholders, coupled with most extravagant expenses, it was not responded to, which led to the sale of the materials, and the final stoppage of the mine.
The present proprietors, warned by the experience of the past, have determined to make a first and final call, which, whilst it will be ample for the development of these rich deposits, will at once preclude the necessity of any future call.
Prospectuses, containing full particulars, with forms of application for shares, may be obtained on application to Mr. Thomas Allsop, 1, Royal Exchange-buildings; or to the Secretary, at the offices of the Company, 3, Hatton-court, Threadneedle-street, London; also of the following sharebrokers:—Mr. Robert Goss, Bristol; Mr. N. Lee, Birmingham; Mr. Speakman, Manchester; Mr. John Davis, Liverpool; Mr. A. Smith, Leeds; Messrs. Allsop and Sons, Hull; Mr. B. Jones, Preston; and Mr. Trickett, Plymouth. 49

WHEAL ENYS TIN MINE, WENDRON, CORNWALL.—Held under lease for 21 years, nearly 20 of which are unexpired, at 1-18th dues; to be reduced to 1-20th as soon as an engine shall be erected.
Divided in 1070 shares, and conducted strictly on the Cost-book System, under the superintendence of a Committee.
Mr. JOHN TRETHOWAN, Little Falmouth, *Purser.*
Messrs. TWEEDY & CO., Falmouth, *Bankers.*
WHEAL ENYS MINE, held under lease, from John Samuel Enys, Esq., of Enys, is situated at PORKELLIS, in the parish of Wendron, which it is almost unnecessary to state is one of the richest and most extensive tin districts in Cornwall. It extends about half a mile from north to south, and nearly one mile from east to west, on the run of the extraordinary number of 29 lodes, which have all produced tin from surface, to the adit level; some of them in very large quantities.
The mine has been worked from time to time by various parties of poor adventurers, who unfortunately never possessed means to erect machinery, with the exception of the last party, who worked between 30 and 40 years since. These men managed to erect a water-wheel, on Trevarno and Buck's Lodes, which was worked successfully and profitably during the winter months; but in summer they had no water at surface, although too much in the mine to be kept under effectually by horses. With even those disadvantages they persevered, sank several fathoms below the adit, returned large quantities of tin, and when ultimately obliged to abandon the mine, left, as stated by old men, who worked there up to that time, a rich bottom of tin, 40 fathoms in length.
From that period nothing has been done, until about four years since, when the present company obtained the grant and subsequently the lease.
Up to the present time, they have cleared, secured, and continued the adit at a considerable expense (which is about 22 fms. from surface) throughout the sett. They have also cleared and secured several shafts, and driven cross-cuts, to intersect the lodes, which have been invariably found worked away at that level; but even from arches left by the old men, they have returned £400 worth of tin, in quality not to be excelled in the country, thus confirming all traditions respecting richness of the lodes. A still farther and stronger corroboration will be found in the fact, that every burrow (and the sett is covered with them) will pay for returning, indeed, will set on a moderate tribute, provided the water be brought to surface, which by aid of an engine, can be easily accomplished; thus clearly proving that immense quantities of tin must have been raised at former workings on the backs of the lodes. In fact, there is no part of the sett which does not show tin, or strong indications thereof, on removing the meat earth.
Several adventurers who had held nearly half the mine, who were considerably in arrear, and who could not possibly contribute towards the necessary fund for effectually prosecuting the mine, have been compelled to relinquish the same, which the present proprietors have accepted, releasing the defaulters from all claims on them; which interest (500 shares) is now offered to the public at 30s. per share, free of all liabilities to the present time, in order to cover a portion of the loss, and to secure the co-operation of persons to whom the comparatively trifling amount required to bring the mine into full and profitable operation, will not be an object of very great consideration.
As soon as the shares are disposed of it is intended to erect a 36-in. cylinder steam-engine; and by a very liberal calculation the utmost capital required for engine, pitwork, necessary erections, and for putting the mine at least 50 fathoms under the adit, will not exceed £3000; but taking into consideration the certainty of raising tin to meet at least a part of the working cost, immediately on getting into whole ground, not more than £2000 will be required, and there is no hesitation in stating the conviction that with this outlay, Wheal Enys will prove to be one of the best, most profitable, and most lasting mines in the country. This is the unanimous opinion of every person who knows the locality, or has visited the mine, and the inspection of practical men, on behalf of any person, disposed to purchase is earnestly invited, for which every facility will be afforded, on application to the purser, at Little Falmouth, Flushing.
Immediately the allotment shall be completed, a generally meeting of adventurers will be convened, of which due notice will be given, for the purpose of ordering an engine, and deciding on the amount of calls to be made, which after the engine shall be paid for, will not probably exceed 5s. per share every three months.
Early applications for not less than five shares, may be addressed by Mr. Trethowan, the purser, at Little Falmouth; to Messrs. T. Leeds and Son, St. Anne's, Manchester; Mr. W. Fenton, 5, White Hart-court, Lombard-street, London; Mr. John Davies, Tower-Buildings, Liverpool; Messrs. T. W. Flint and Co., Hull; or to Mr. Williams, accountant and mine broker, Green Bank-terrace, Falmouth.

AGENTS' REPORTS.
The following are extracts from reports of mining agents, who have inspected the mine:
Capt. RICHARD EUSTICE, of Stray Park Mine, says,—"Wheal Enys is in granite, with a beautiful elvan course, running through the sett, near Trevarno and Buck's Lodes." * * * "There is no tract of land, to my knowledge, in the county, so abundant in mineral veins, lying together, in such a convenient position for a well-arranged system of mining, and so situated as to render a small steam-power sufficient for the proper drainage of the whole." * * * "£1000 will be sufficient to provide steam-power and pitwork for draining the mine; and for a few months, a further outlay of from £70 to £80 per month for labour and materials (without taking into consideration the tin you must raise), immediately on getting under the old workings, or the burrows, which will pay for dressing, if you bring the water to surface; a new mine will be opened, which I have no donbt, will quickly repay the outlay, and ultimately realise great wealth." * * * "There cannot be a doubt, that Wheal Enys, properly worked, will prove one of the most profitable mines in the county." Capts. MARTIN and BARNETT say,—"When the last party abandoned the mine, about 40 years ago, from want of machinery, they left in the bottom level, on Trevarno lode, a rich bottom of tin, 40 fms. in length; very rich courses of tin were also left from the same cause on Buck's lode." * * * "The water from the greater part of the lodes can be drained by a 30-inch cylinder engine, which can be erected for about £600. Clearing and securing shafts and levels, with necessary erections, will require about £1400 more; so that a capital of about £2000 will make this one of the most profitable and lasting mines in the county." * * * "By drawing the water to surface you will be enabled to dress the burrows, and return from them sufficient tin to pay the monthly cost of working the engine."
Capt. MICHAEL W. MARTYN says,—"Had I not inspected Wheal Enys Mine, I would not have believed it could have presented such prospects of success. Several of the lodes, particularly Trevarno and Bucks, have been completely worked away, at and above the adit level, which is about 22 fathoms from surface, and the two above-named a few fms. deeper, by means of a water-wheel: (I consider this to be beyond a speculation) and if you wish to work your mine profitably; lose no more time, put up immediately a small steam-engine, and I sincerely believe your wishes will be speedily accomplished. I find you have returned from arches left by former parties nearly £400 worth of tin—and that, in connection with the immense excavations, as well as the burrows which will, I believe, give a handsome profit to the adventurers, if they bring the water to surface, must convince every person acquainted with mining, that tin to a very great amount, must have been returned from the backs of the lodes; and that you have only to go deeper to obtain it in much larger quantities. From the Bissoe tin bill of the 21st inst., I perceived you obtained at the rate of £54 per ton for your tin, which is sufficient proof of its quality, as well as what you may fairly expect at greater depth." 50

TREMAR COPPER MINE—ST. CLEER, CORNWALL.
In 1024 shares.—Deposit £1 per share.
PURSER—Mr. WILLIAM CHANNING, 7, South-street, Exeter.
MANAGING AGENT—Captain Rule.
BANKERS—West of England and South Wales District Bank, Exeter.
SECRETARY—Mr. J. Jury, Exeter.
OFFICES—3, CASTLE-TERRACE, EXETER.
This MINE is situate in the parish of ST. CLEER, near Liskeard, adjoining and parallel to the South Caradon Mines, whose riches are almost unequalled; and the vast profits realised by the fortunate adventurers are too well known to need comment—£5 per share was only expended when they came to enormous riches. It also nearly adjoins the justly celebrated and very profitable West Caradon Mine, being situated a little more than a quarter of a mile south thereof, with lodes running parallel, and near the junction of granite and killas—a point well-known to miners to be productive; with a constant supply of water for dressing purposes, and other natural advantages, which makes it a more desirable speculation than any other in this favourable mining district.
The sett is extensive, and through which, running east and west, from half to three-quarters of a mile, many very large and promising lodes have been discovered, together with the West Caradon great cross-course, extending from north to south, throughout the sett, and in the very centre of the mine.
An adit level has been driven north, from 70 to 80 fathoms, and has intersected three east and west lodes, averaging 2 to 2½ feet wide, producing good stones of yellow ore; in the present end also the lode is 2 ft. wide, of the same splendid appearance and character as that of the South and West Caradon.
A shaft has also been sunk about 5 fathoms, on a lode of the same kindly appearance, 2 feet wide, with very regular walls. The gossan, peach, prian, black and yellow copper ore, are of a very rich description.
It now, therefore, only remains necessary to erect a 40-inch cylinder steam-engine, with pumps, &c., and sink the shaft to a moderate depth, the estimated costs of which are about £1500. When this is accomplished, there can be very little doubt but the shareholders will congratulate themselves on the stability and very profitable nature of their adventure. For, as a proof of the opinion entertained, and the high estimation and value placed on this mine, the South Caradon adventurers have secured to themselves 424 shares out of the 1024 to be allotted.
In order, therefore, to carry out this undertaking in a *bonâ fide* and equitable manner, together with a view to the strictest economy, it has been determined to proceed with the works with all possible speed, for the purpose of developing the riches which all competent judges who have seen it unhesitatingly declare exist in the Tremar Copper Mine.
The future calls will not exceed 10s. per share, and it is confidently anticipated that £4 per share only will be required. There are to be no free shares—£300 are to be paid for the work already done, for the sett, and all preliminary expenses. The dues to the lord are 1-15th.

REPORTS.
Dec., 1850.—We find your sett is extensive, being about half a mile square. The stratum of ground through which your principal lodes run is a soft killas, or clay-slate, a little south of the junction of the killas and granite strata, and nearly parallel with those which have proved so productive in the immediate neighbourhood (Caradon). There seems to be several lodes in the sett, but two only are sufficiently opened to justify us in speaking of. The south lode, opened in the field, is about 2 feet wide, almost wholly composed of a very fine gossan, presenting as promising an appearance as it has ever fallen to our lot to observe so near the surface. The north lode is cut in the adit, and explored a few fathoms east of the cross-cut; is large in the east end, produces stones well spotted with yellow copper ore, and will probably prove a productive lode in depth; its appearance at present warrants such a belief, and our advice to you is to prosecute the mine with vigour, having a strong hope that you will be amply rewarded for your outlay.
J. OSBORN, Wheal Venton.—H. TAYLOR, West Caradon Mine.

South Caradon Mine, Dec. 2.—We have visited Wheal Tremar, and find an adit level extended north from 70 fathoms to 80 fathoms; there are three east and west lodes to be seen in this adit; on the course of one of them, a lode 2 feet or 2½ feet wide—a level has been driven east about 20 fathoms, throughout the whole of this distance; the lode produces stones of good yellow ore; and, considering the depth (not being more than 6 fms. deep) it has altogether a promising appearance; and in the present end is about 2 feet wide, of the same kindly character. The lode you have cut and sunk the shaft on, in the field, is about 2 feet wide, with very regular walls, and in a nice channel of killas, not far from the granite. We consider the concern a fair speculation, and would advise you to prosecute its developement with all possible speed, as the indications are quite as good as can be reasonably expected at the depth.—R. DUNSTAN, West Caradon Mine.
OLIVER O. TREWREN, South Caradon.
It is believed that very little more than £4 per share will be required before the mine is in profitable work; and as more than one-half of the shares are already taken up by highly respectable shareholders, an early application to secure a portion of the remaining is necessary—addressed either to the purser, 7, South-street, Exeter; or the secretary, at the office of the company, 3, Castle-terrace, Exeter; at Messrs. Syms and Co., mining sharebrokers, Tavistock; Mr. James Crofts, 4, King-street, Cheapside, and J. S. Tripp and Co., Lombard-street Chambers, Clement's-lane, London; Messrs. T. W. Flint and Co., Hull; Mr. Isaac Ironside, Sheffield; and Mr. John Davies, 38, Tower-buildings, Liverpool 51

BRITISH MUTUAL GOLD MINING COMPANY.
REGISTERED PURSUANT TO ACT OF PARLIAMENT.
Right Hon. LORD ERSKINE *Chairman.*
COUNT LOUIS DE MASSIAC, *Deputy-Chairman.*
Capital £50,000, in 50,000 shares, of £1 each.
ESTABLISHED for WORKING MINES in CALIFORNIA, upon the principle of the JOINT CO-OPERATION OF LABOUR AND CAPITAL.
The Miners employed by this Company, whose comforts and protection are assured upon the rules and conditions contained in the prospectus, are to participate with the shareholders in the profits of the venture.
Shares to be paid on allotment—no calls or other responsibility whatever.
Applications for shares and prospectuses may be made at the Company's offices, No. 30, Great George-street, Westminster, where every information will be given.
Miners and others desirous of joining this Company on the terms of the prospectus may apply.—Prospectuses forwarded by post. 52

WEST WHEAL ABRAHAM TIN AND COPPER MINE,
CROWAN, CORNWALL.
In 2000 shares, of £10 each—£5 to be paid on appropriation, and the remainder (if required) by calls of £1 at the two-monthly meeting, and to be
CONDUCTED ON THE COST-BOOK SYSTEM.
This mine consists of those well-known mines—Carnine, Wheal Maria, Wheal Dolby, Wheal Mary, and Wheal Mount, and exceed 1 square mile in extent, and are surrounded by mines making large returns.
The prospect this extensive sett holds out for investment is evident, having the rich lodes of Wheal Abraham and others running through this sett. Above half the mine has already been taken up by influential parties.
Immediate application must be made to Mr. Molyneux, 6, Finsbury-place South; or to Mr. W. Hoskin, Redruth, Cornwall, where plans and reports of the mine may be seen. 53

BRISTOL AND EXETER RAILWAY.—Notice is hereby given, that the next HALF-YEARLY GENERAL MEETING of the proprietors of this Company will be HELD at the White Lion Hotel, in the city of BRISTOL, on Thursday, the 27th of February, 1851, at One o'clock, for the Election of Three Directors, in the room of those who retire by rotation, and for other affairs.
The Chair will be taken at One o'clock precisely.
Notice is also given, that the said meeting will be made Special, for the purpose of considering the provisions of the following bill, brought into Parliament by this Company—viz.: "A Bill to Amend some of the Provisions of the Act relating to the Bristol and Exeter Railway Company, and to grant to such Company certain powers of holding shares in other undertakings;" when a draft of such bill will be submitted to the meeting.
JAMES W. BULLER, Chairman.
The retiring Directors may be re-elected.—The transfer books of shares and consolidated stock will be closed on Monday, the 17th of February, and not re-opened until after the said half-yearly general meeting, on the 27th. By order of the Board,
Bristol Terminus, Jan. 23, 1851. J. B. BADHAM, Secretary. 54

KUPER & CO.'S PATENT IMPROVED WIRE ROPES,
MANUFACTORY—GRAND SURREY CANAL, CAMBERWELL, LONDON.
SOLE AGENTS.
FRANCIS AND H. J. MORTON,
10, NORTH JOHN-STREET, LIVERPOOL, and 9½, ALBION-STREET, LEEDS.
The great SUPERIORITY and ECONOMY of WIRE ROPES for MINES and RAILWAYS, over Hemp Ropes or Chains, has been fully established by extensive use in all the principal mining districts in the United Kingdom for many years—being cheaper, much lighter, more durable, and a great easing to the engine.
KUPER & CO. request particular attention to their IMPROVED FLAT ROPES, and their very superior mode of stitching; also to their ROUND ROPES, for Inclines, &c., and PIT GUIDES or CONDUCTORS made of very thick wire, and in one length, without joints.
Prices, carriage free to the nearest railway or water station, 56s. per cwt. for round 70s. per cwt. for flat ropes; galvanising, 10s. per cwt. extra.
SIGNAL CORD, galvanised or varnished, of all sizes, for Mines, Railways, &c., from 14s. per 100 yards.
GALVANISED SIGNAL PULLEYS, with brass wheels, 6s. per dozen.

GALVANISED and CORRUGATED IRON ROOFING, GUTTERING, SPOUTING.
WATER and GAS PIPES, of all kinds, FIXED and SUPPLIED.
GALVANISED GAS, WATER, and STEAM PIPES, of great strength.
FAIRBANK'S PATENT WEIGHING MACHINES, of all sizes, at very low prices.
ASPHALTED ROOFING FELT, 1d. per square foot.
DRY HAIR BOILER FELTS, of all thicknesses.
PATENT WIRE STRAND FENCING and ORNAMENTAL WIRE WORK, for Railway, Park, and Agricultural Fencing.—F. & H. J. Morton have fixed upwards of 500 miles of this fencing in the last few years.—Price from 1s. 6d. per yard, fixed, complete.
☞ STOCKS constantly kept in LIVERPOOL, LEEDS, and LONDON.
F. & H. J. MORTON,
PATENT GALVANISED IRON AND SPOUTING WORKS,
10, NORTH JOHN-STREET, LIVERPOOL, and 9½, ALBION-STREET, LEEDS. 55

THE MINING ALMANACK, FOR 1851.—Under the especial Patronage of His Royal Highness PRINCE ALBERT, K.G., Lord Warden of the Stannaries, Chief Steward of the Duchy of Cornwall and Devon, &c., &c.—Edited by HENRY ENGLISH, Editor of the *Mining Journal, Mining Review*, &c. The THIRD VOLUME of this work, containing upwards of 500 pages, will be shortly ready for publication, and, in addition to the Statistical and Tabular Matter, will contain several original and scientific papers, pertaining to Mineralogy, Mining, and the Allied Sciences, with Review of Metropolitan and Provincial Institutions devoted to Science—brief and succinct Narratives of their Origin, History, Constitution, and Laws, with a List of their present officers, &c., including the Royal Society, from its foundation to the present period; the Mineralogical and Fossiliferous Collection in the British Museum, will also appear. The Great Exhibition of 1851 will claim an extended space, and meet with that attention which it demands with reference to its Geological and Mineralogical Products, while the Mechanical Sciences will not be neglected, the object of the Editor being to render the MINING ALMANACK fully worthy of the august patronage and extended support it has met with from the public.—Price 6s.
Published by Simpkin, Marshall, and Co., Stationers' Hall-court, Paternoster-row; offices, 25, Fleet-street, where all communications to the Editor are to be addressed. 56

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES AND CLOCKS.
E. J. DENT, 82, Strand; 33, Cockspur-street; 34, Royal Exchange (clock tower area), Watch and Clock Maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £8 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each.
DENT'S PATENT DIPLIEDOSCOPE,
or Meridian Instrument, is now ready for delivery.—Pamphlets containing a description and directions for its use 1s. each, but to customers gratis. 57

GAS!—GAS!—GAS!—GUISE'S CONICAL SHADOWLESS GAS BURNER is SUPERSEDING EVERY OTHER BURNER of the day. It is now being generally ADOPTED in TOWN and COUNTRY, with very great advantage to consumers. The LIGHT is PURER and WHITER than that from any other burner. Though the gas flame is doubly deflected, a common straight chimney is employed to produce the draught, so that if broken it is easily replaced.
The CATOPTRIC REFLECTOR is a most important feature of this invention; both may be had of all respectable gas-fitters, and at GUISE'S GAS BURNER MANUFACTORY, 45, CLERKENWELL-GREEN, LONDON.—None are genuine unless marked "Guise's Patent." TESTIMONIAL.
I have tried several comparative experiments with Guise's Conical Shadowless Gas Burner, and I consider it to give a PURER and WHITER flame than I have yet seen produced by any other burner. ISHAM BAGGS. 58

SEWERAGE OF LONDON.—The ATTENTION of the COMMISSIONERS appointed to determine upon the MOST EFFICIENT MATERIAL for the CONSTRUCTION of the SEWERS OF LONDON, is particularly directed to the ASPHALTE OF SEYSSEL, which more than any other material is applicable to the CONSTRUCTING and INTERNAL COATING of BRICK CULVERTS and OTHER CHANNELS for DRAINAGE.
The experiments made by the Royal Artillery on the embrasures of Plymouth Citadel, constructed of Seyssel Asphalte Brickwork, under the orders of the Hon. Board of Ordnance, have fully proved the superiority, adhesiveness, and strength of Seyssel Asphalte over all other cementitious compositions. A printed account of these experiments can be had on application to I. FARRELL, Secretary,
Seyssel Asphalte Company—"Claridge's Patent"—Established 1838.
Note.—The application of the Asphalte of Seyssel is specially recommended by the Commissioners on the Fine Arts for covering the ground line of brickwork in marshy situations, and it has been suggested that it would be peculiarly applicable for covering the *areas* of closed *grave yards*, and for the construction of *catacombs.* 59

ANOTHER CURE of VIOLENT COUGH, SORE THROAT, &c. &c.—Dr. LOCOCK'S PULMONIC WAFERS. Dated Kirton, Boston.
SIR,—Having had an ulcerated sore throat and violent cough for several months, accompanied with excessive expectoration, and obtaining no relief from my medical attendant, and being recommended by my neighbour, Mrs. Maddison (who had experienced great benefit from Dr. Locock's Wafers) to try them, I was induced to do so, and feel great pleasure in bearing my testimony to a speedy cure, experienced by me from one box only. (Signed) CHARLOTTE HEAD.—To Mr. J. Noble, Market-place, Boston.
Dr. Locock's Wafers give instant relief, and a rapid cure of asthmas, consumption, coughs, and all disorders of the breath and lungs. They have a pleasant taste.—Price 1s. 1½d., 2s. 9d., and 11s. per box.—Agents: Da Silva & Co., 1, Bride-lane, Fleet-street, London; and sold by all medicine vendors.—Also Dr. Locock's Female Wafers, the only medicine recommended to be taken by females. Have no taste of medicine.—Beware of imitations in the form of pills. 60

COUGHS, ASTHMA, AND INCIPIENT CONSUMPTION are EFFECTUALLY CURED.—KEATINGS'S COUGH LOZENGES have been proved by long experience to be equally efficacious and powerful in those severer forms of pulmonic affections—asthma, incipient consumption, chronic bronchitis, and spasmodic cough—as in the milder, but often not less troublesome disorders of the throat and chest, winter cough, hoarseness, difficulty of breathing, and irritation of the throat, &c. Their entire freedom from all deleterious ingredients and opiates, whilst it renders Keating's Cough Lozenges a safe remedy for the most delicate female or youngest child, has caused them to be held in the highest esteem by public speakers, clergymen, and professional singers; but, perhaps, the high approval which is bestowed upon these lozenges by some of the most eminent of the faculty, is the best and most convincing guarantee of their safety, efficacy, and purity.—Prepared and sold in boxes, 1s. 1½d., and tins, 2s. 9d., 4s. 6d., and 10s. 6d. each; by Thomas Keating, Chemist, &c., No. 79, St. Paul's Churchyard, London. Sold retail by all druggists, and patent medicine vendors in the kingdom.
IMPORTANT TESTIMONIAL.
Church-street, Folkestone, Nov. 23d, 1849.
SIR,—Having been troubled with a very bad cough for the last eight months, I applied to Mr. Hammon, chemist of this town, for some relief; he recommended me your "Cough Lozenges," which I am happy to say cured me in a week. I beg most cordially to recommend them, and request you will not hesitate to make this letter public; such a valuable remedy cannot be too highly recommended. JOHN HILL, Esq. 61

(carried to Page 56)

PRICES OF MINING SHARES.

It being difficult to obtain a correct knowledge of all the mines in our list, we trust that agents, and others interested, will assist us, by forwarding any additions, or corrections, with which they may be acquainted—our object being to present it as accurate as possible. We have also added a column to note the actual business transacted; but which, without the constant assistance of brokers and agents, cannot become so complete as we could wish. The desirability of such a record is generally admitted, and we invite the co-operation of all parties concerned, in rendering it perfect.

Shares.	DEVON DISTRICT.	Paid.	Last Price.	Transactions.
2000	Aylesborough (tin), Sheepstor	2	2	
4000	Bedford United (copper), Tavistock	2½	6½ 7½	6½ 6½ 6¾ 7
1280	Birch Tor and Vitifer (tin), Dartmoor	10½	4	
1024	Borrington Park (silver-lead), Plympton	¼	3½ 3½	3½ 4
4060	Devon and Courtenay Consols (copper)	1½	⅝ 1	
1024	Devon Great Consols (copper), Tavistock	1	280	270 75 280
768	Devon Great Tincroft, North Bovey	¼	6	
250	East Birch Tor (tin), North Bovey	3	3	
2048	East Crowndale (tin), Tavistock	7¼	2	
4000	East Gumnis Lake Junction (copper)	¼	1	1 1½
9000	East Tamar Consols (silver-lead)	1½	1½	1½ 1½
2048	East Wheal George (cop.), Walkhampton	1	10	
512	East Wheal Josiah (copper), Tavistock	1½	1	⅝
4000	East Wheal Russell (copper), Tavistock	¼	4 6 6½	5 6 6½
1024	Exmoor Eliza (copper), South Molton	2½	5	
1500	Hennock (silver-lead), Hennock	2½	2½	2½
1024	Kingsett and Bedford (lead and copper)	3½	2½	2½
1743	Lamberoos Wheal Maria (copper & tin)	11½	12	10
3000	Nap Down (silver-lead), Combmartin	1	1	1
1024	New East Crowndale (copper and tin)	2	2	
1024	North Wh. Robert (copper), Walkhampton	2	2 2½	
1000	Peter Tavy and Mary Tavy (copper)	2½	8	
512	Plymouth Wheal Yealand (tin), Plymouth	6½	6	
2048	Runnaford Coombe (tin)	2½	3½ 4	
256	South Friendship Wh. Ann (copper & tin)	30	28 30	
256	South Molton (lead)	12½	12½	
1024	South Plain Wood (copper), Ashburton	3½	7	7
9000	South Tamar (silver-lead), Beer Ferris	1	2½	2½ 2½ 2½
9600	Tamar Consols (silver-lead), Beeralston	4	6	6½ 6
687	Tavy Consols (copper), near Tavistock	8	3	3 3½
1024	United Mines (copper and tin), Tavistock	10	10	
1024	West Downs (copper and tin), Whitchurch	2	—	
1024	West Wheal Friendship (copper)	3	2½	2½
4000	West Wheal Russell	¼	1	¼ ¾
1070	Wheal Adams (lead), Christow, Exeter	13½	16	
256	Wheal Carpenter (tin and cop.), Gwinear	1	2	1½ 2
1024	Wheal Crebor (copper), Tavistock	2½	3½ 3½	3½ 3½
1024	Wheal Emily (antimony and lead)	3	5½ 6	6
1024	Wheal Fortescue (copper), Tavistock	4½	5½	3 3½ 5
764	Wheal Franco (copper), near Tavistock	13½	14	13 14
126	Wheal Friendship (copper)	120	120	
1024	Wheal Hamlyn, near Oakhampton	¼	1	1
2048	Wheal Harris (lead), near Tavistock	¼	1	1 1½
2000	Wheal Langmaid (lead)	¼	1	1½ 1½
1024	Wheal Mary Ann (copper), Bridestow	—	1½	
5000	Wheal Providence, South Sydenham	¼	2½ 4	2½ 2½ 3
1024	Wheal Russell (copper), Tavistock	4	6	3½ 4 6½
	EAST CORNWALL DISTRICT.			
	FOWEY, CALSTOCK, LISKEARD, ST. AUSTELL.			
3650	Bawden (silver-lead)	¼	⅛ ¼	
256	Berriow (copper), Liskeard	2½	5	5
1024	Bodmin Consols (lead), Wadebridge	4	4	
5000	Bodmin Moor Consols (tin and copper)	1	4½	
—	Bodmin Wheal Mary (tin)	8	6½	
406	Butterdon (lead), Menheniott	1½	8 9	8½
1000	Callington (lead and copper), Callington	28	7	8½ 9½
4000	Calstock United (copper)	5	5	5
1168	Caradon Great Cons. (cop.), Linkinhorne	7	3	
1536	Caradon Vale (copper and lead), St. Ive	1½	1½	
3000	Carthew Consols (cop. & lead), Wadebridge	4	7	
500	Comblawn (lead), Callington	8	—	
1000	Coombe Valley Quarry (slate), St. Ginnis	5	2	
211	Craddock Moor (copper), St. Cleer	22½	7	
2560	Drake Walls (tin and copper), Calstock	6½	3	2½ 3½
—	Duke of Cornwall	3	3	
1024	East Polgooth (tin)	6	7½	
1024	East Sharp Tor (copper)	5	8	
1000	East Trescoll (tin), Lanivet, near Bodmin	1	2	
256	East Wheal Rashleigh, Lonreath	—	10	
494	Fowey Consols (copper), Tywardreath	40	30	
256	Gonamena (copper), St. Cleer	46	15	
2000	Great Beam (tin)	5	7	
1024	Great Sheba Consols (tin and copper)	2	13	10½ 12 13
3072	Great Wheal Mitchell Cons. (cop.), Lanivet	3	5	
—	Gt. Wh. Rough Tor Con. (cop.), Camelford	29	20	
6000	Growa Slate Company, Camelford	5	5	
1024	Hawkmoor (cop.), Calstock, Gunnis Lake	5	17	
6000	Heigneton Down Con. (copper), Calstock	2½	4	
512	Herodsfoot (lead), near Liskeard	27	12 12½	
1000	Holmbush (lead and copper), Callington	24	22	22 24
6000	Marke Valley (copper), Caradon	10	3½	
256	Mineral Court (tin), near St. Austell	22½	50	
1024	Moditonham & Marrabro' (copper & lead)	1⅞	2½ 3	
256	North Fowey Consols	—	25	
1024	Okel Tor (lead)	1½	4½	
128	Par Consols (copper), St. Blazey	55½	650	
406	Penhanger	1	6	
2048	Pentire Glaze (silver-lead), St. Minver	5	8	
200	Phœnix (copper and tin), Linkinghorne	—	240	
5000	Roche Rock (tin), Roche, near St. Austell	1	1	
5000	Rocks Mine (tin), Roche, near St. Austell	5	5	
256	South Caradon (copper), St. Cleer	30	122½ 125	115
256	South Trelawny (lead), near Liskeard	31	7½	7½
256	South Wheal Josiah (copper), Calstock	2	4	
999	St. Minver Consols (silver-lead)	1	6	
128	Tokenbury (copper), St. Ive, Liskeard	8½	8	
2048	Trebell Consols (tin and copper), Lanivet	1½	1½ 1½	1½
512	Treburget United (lead), St. Teath	1	—	
600	Tregardock	1	5	
5000	Tregear Consols (antimony & silver-lead)	1	—	
256	Tregorden (silver-lead) Wadebridge	10	7	
256	Trehane (silver-lead), Menheniot	1½	15	18 15
512	Trethevy (copper), St. Cleer	7	5	7
512	Treville (lead), Lewanick	1½	6 7	
5000	Warleggan Consols (copper)	⅛	⅛	
256	West Caradon (copper), Liskeard	20	107½	105 6 12½
512	West Fowey Con. (tin & cop.), St. Blazey	40	60	
1024	West Par Consols (copper), St. Blazey	10	11	
1024	West Phœnix, Linkinghorne	3	4	
2560	West Polgooth (tin), St. Ewe & St. Mewan	5	3	
300	Wheal Arthur (lead), near East Wh. Rose	17	49	
1225	Wheal Arthur (copper), Calstock	1½	1	2
1024	Wheal Bray (copper), Alternum	11½	—	
2324	Wheal Calstock (copper), Calstock	9	9	
3000	Wheal Dora (tin and copper), St. Cleer	3	3½ 4	
182	Wheal Ennis (lead), St. Erme	12	20	
1000	Wheal-an-Grose (tin), St. Columb Major	5	5 6	
256	Wheal Kingston (copper and silver-lead)	¼	1	
6000	Wheal Langford (copper and silver-lead)	¼	2½ 2½	2½
1024	Wheal May (silver-lead and copper)	1½	1½	
512	Wheal Mary Ann (lead), Menheniot	5	64½ 65 67½	65 6 7½ 70
3000	Wheal Penhale (lead and copper)	2½	6	
128	Wheal Pollard (copper), St. Cleer	15½	—	
1056	Wheal Sarah (silver-lead), St. Kew	5	—	
512	Wheal Sophia (silver-lead), Lezant	7	7	
512	Wheal Spry (copper and lead) St. Columb	¼	1	
—	Wheal Tom (tin & copper), Stoke Clims.	5	7	7
1100	Wheal Trescoll (tin), Lanivet, Bodmin	8	8	6
520	Wheal Trelawny (silver-lead), Liskeard	3½	53 55	55 56 57
256	Wheal Tremaine (copper), St. Ervan	11	2½	
1024	Wheal Venton (silver-lead), Liskeard	3½	9 9½	8½ 9
910	Wheal Vincent (tin), Alternum	7½	8	6½
128	Wheal Violet (tin and cop.), St. Stephens	5	5½	
184	Wheal Vyvyan (cop. & tin), Constantine	60	60	
	ST. AGNES, NEWLYN, AND PERRANZABULOE.			
107	Budnick Consols (tin), Perranzabuloe	52½	10 11½	
128	East Tywarnhayle (copper), St. Agnes	5	8	8½ 11
512	East Wheal Leisure (copper)	8	21	
128	East Wheal Rose (silver-lead), Newlyn	80	575	
252	North Wheal Leisure, Perranzabuloe	1½	1½	
1160	Perran St. George (copper and tin)	21½	45	
1000	Polberro (tin), St. Agnes	15	—	
256	Garras (lead), near Truro	43	23	
500	Tywarnhayle (cop.), Illogan & St. Agnes	60	44	
3000	West Shepherd (silver-lead and copper)	2½	2	
2048	West Wheal Rose (lead), Newlyn	2½	3	
100	Wheal Friendly (tin), St. Agnes	70	65	
4000	Wheal Golden (lead), Perranzabuloe	2	5 6	
216	Wheal Henry (copper), Kea, near Truro	25	8 12	
128	Wheal Vlow; Perranzabuloe	3	5	
	GWENNAP DISTRICT.			
1056	Carvannall (copper), Gwennap	2½	8	5½
128	Comfort (copper), Gwennap	65	60	70 75
96	Great Consols (copper), Gwennap	1080	250	
282	Lanarth Consols (copper), Gwennap	10	11	
96	Treasvean (copper), Gwennap	10	220	225
120	Trethellan (copper), Gwennap	5	18	
120	Treviskey and Barrier (copper)	130	260 275	230
200	United Mines (copper), Gwennap	300	110	
120	West Trethellan (copper), Gwennap	15	20	
3725	West Wheal Jewel (tin and copper)	12	2	
512	Wheal Trefusis (copper), Gwennap	6½	10½ 20½ 2½	19 19½ 20½
	REDRUTH DISTRICT.			
1024	East Buller (copper), near Redruth	2	7 7½	7½
128	East Carn Brea (copper), Redruth	4	3	
256	East Seton and Wheal Maude, Redruth	4	4½	
256	East Tolgus (copper), Redruth	4	19 20½ 21	
256	Grambler and St. Aubyn (copper)	80	50 53	
1024	North Buller (copper), Redruth	4	14 15	14 15
1200	North Wh. Buller, or Gt. South Tolgus	5	7	
256	North Trefusis (tin and copper), Redruth	1	2 3	
256	North Tolgus (copper), Redruth	7	20	

Shares.	REDRUTH DISTRICT.	Paid.	Last Price.	Transactions.
256	South Tolgus (copper), Redruth	16	157½	155 157½
5000	Treleigh Consols (copper), Redruth	6	3½	2½ 3
128	West Buller (copper), Redruth	10	800	850
500	Wheal Daniell (copper), Chacewater	10	10	
182	Wheal Elizabeth (copper), Redruth	19	52½	
990	Wheal Mary (copper), Redruth	14½	7½	
128	Wheal Plenty (copper), Redruth	19	28 30	
126	Wheal Union (copper), Redruth	40	45 50	
512	Wheal Selena (copper), Redruth	1	1½	
1024	Wheal Uny (tin and copper)	2	5 5½	5½
	ILLOGAN DISTRICT.			
1000	Carn Brea (copper and tin), Illogan	15	115	120 125
2560	Cook's Kitchen (copper and tin), Illogan	15½	10	9 10
128	East Pool (tin and copper), Pool, Illogan	24½	155	160
94	East Wheal Crofty (copper), Illogan	125	150	
256	East Wheal Frances (copper), Illogan	2½	4⅝ 4½	4
6000	North Wheal Basset (copper and tin)	—	25	
100	North Pool (copper and tin), Pool	45	420	
—	Polgeare (copper and tin)	1	4 4⅛	
2000	South Carn Brea (copper), Illogan	10	—	
1100	South Dolcoath (copper), Illogan	6	6	
256	South Wheal Basset (copper), Illogan	10½	340 345	347½ 350
124	South Wheal Frances (copper), Illogan	75⅝	650	
6000	Tincroft (copper and tin), near Pool	7	11½ 11½	9 10½
940	West Tolgus (copper), Illogan	13½	6½	6
512	West Wheal Frances (copper), Illogan	7	25	24
500	West Wheal Towan (copper), Illogan	15	12½	
1000	Wheal Agar (copper), Illogan	6	5½ 5½	
	CAMBORNE DISTRICT.			
1000	Camborne Consols (copper), Camborne	7	7⅛	
256	Condurrow (copper and tin), Camborne	20	11¼	
1000	Copper Bottom (copper), Crowan	7	4	9
256	Crane and Bejawsa (copper), Camborne	14	23 26	24
180	Dolcoath (copper and tin), Camborne	252	18 20	
1026	Gustavus Mines (copper), Camborne	5½	6½	
320	Nansegollan (tin and copper), Camborne	1	3	
140	North Roskear (copper), Camborne	10	160	
1026	Pendarves Consols (copper), Camborne	3	6½	
1000	Pendarves and St. Anbyn (copper)	5	6½ 7	
1000	Stray Park and Camborne Vean (copper)	15	21½ 22	21
1200	Tolcarne (tin and copper), Camborne	8	5	
200	West Seton (copper), Camborne	65	170	
2560	Wheal Harriet (copper), Camborne	1	2½ 2½	1½
198	Wheal Seton (tin and copper), Camborne	107	240	
267	Wheal Tryphena (tin and copper)	40	40	38
	WEST CORNWALL DISTRICT.			
5120	Alfred Consols (copper), Hayle	3	15½ 16 17½	14 15½ 16½
1624	Balleswidden (tin), St. Just	9	10¼	
940	Balnoon Consols (tin), Uny Lelant	—	4½ 6	
40	Bolowall and Nanpean (tin), St. Just	—	16	
128	Boscean (tin), St. Just	10	20	
60	Bosorn (tin), St. Just	5	6	
100	Botallack (tin and copper), St. Just	182	150	
1000	Carbona (tin and copper), Crowan	5	10	
1024	East Balleswidden (tin), Sancreed	1½	2	
256	East Godolphin (copper), Crowan	17½	13	
1024	East Wheal Reeth	⅛	1½	⅛
1024	East Wheal Margaret (tin and copper)	¼	1½ 1½	
2500	Georgia Consols (tin), St. Ive's	2½	7 7½	
1024	Great Wheal Alfred, St. Erth and Phillack	2	7	
512	Great Wheal Baddern (tin and silver-lead)	20	80 100	
512	Hawke's Point (copper), Uny Lelant	7	6 7	5
256	Lelant Consols (tin), Uny Lelant	53	21½ 25	
160	Levant (copper and tin), St. Just	—	180	170
1000	Lewis (tin and copper), St. Erth	17	18½	18
1024	Mill Pool (tin and copper), St. Hilary	1	8	7
2000	North Levant (tin and copper), St. Just	5	3	
512	North Wheal Vor (tin), Breage, Helston	—	5	
1024	Penzance Consols (tin), Sancreed	1½	2 2½	2½ 3 3½
1024	Praed Consols, Towednack	1	1	
560	Providence Mines (tin), Uny Lelant	20½	30	
300	South Speed (copper and tin), Uny Lelant	15	30	
1024	Spearne Consols (tin), St. Just	2½	10	
1024	St. Aubyn and Grylls (copper and tin)	2½	5½	
94	St. Ives Consols (tin), St. Ive's	80	80	
280	Spearne Moor (copper), St. Just	30	40	
1024	Trannack and Boscence, St. Erth	1	9½ 10½	5½ 6½
1024	Trannack United Mines (tin and copper)	1½	4½	
600	Treloyan Consols (tin), St. Ive's	3½	6½	
100	Trumpet Consols (tin), near Helston	95	80 90	
1024	Wellington (copper & tin), Perranlithnoe	6½	15 15½ 16	15 15½ 15½
1024	West Alfred Consols	5½	12½	11
1024	West Ding-Dong (tin)	⅛	1	
512	West Providence (tin), St. Erth	10	63 65	63 65 66
1024	West Wheal Treasury (copper), Gwinear	8	7½ 7½ 8	6½ 7
1024	West Wheal Virgin (tin), Sancreed	1	2	1⅛
256	Wheal Albert (copper)	10	28 29	
3072	Wheal Augusta (tin), St. Just	⅛	3	2½
120	Wheal Bal (tin), St. Just	10	14	
268	Wheal Courtenay (copper)	20	23	
1000	Wheal Guskis (tin and copper), St. Hillary	¼	3	
112	Wheal Margaret (tin), Uny Lelant	79	165	
1024	Wheal Neptune (copper), Perranuthnoe	1	2	
1080	Wheal Oak, near Helston	1½	1½	
120	Wheal Reeth (tin), Uny Lelant	41	170	
256	Wheal Squire (copper), St. Erth	5	5	
1000	Wheal Susan, Breage and Crowan	1	2½	
1024	Wheal Tremayne (tin and cop.), Gwinear	9½	20½ 21	20½ 21
1024	Wheal Trelusback, Stythians	5	5½ 6	
210	Wheal Prospect	4	7	
	WALES.			
1248	Allt-y-Crib (silver-lead), Talybont	5	10	
1500	Bishopstone (silver-lead), Glamorganshire	2½	10	
8000	Blaenavon (iron)	50	12½	
10000	British Iron, New, regis. (iron)	12	8	
—	Ditto ditto, scrip	10	10	
2000	Bronfloyd (lead)	—	4	
2400	Bryn-Arian (lead), Cardiganshire	2	2½ 2½	
1000	Bryntail, Llanidloes, Montgomeryshire	2½	9½	9
2000	Bwlch Consols (silver-lead), Cardiganshire	4	4½	
1000	Cas-Gyson (silver-lead), Cardiganshire	⅛	1½	
20000	Cameron's Steam Coal (coal), Swansea	10	2 2½	
200	Cefn Bruno (lead), Cardiganshire	6	55	
900	Court Grange (silver-lead), Cardiganshire	10	12	
1600	Craig-y-Mwyn (lead), Llanrhiadr, Mont	8½	10½	
1000	Cwm Daren	1	3	
1000	Cwm Erfin (lead), Cardiganshire	6	6 6½	
2000	Cwm Sebon	—	4	
128	Cwmystwith (lead), Cardiganshire	60	105	
1000	Daren (silver-lead), Cardiganshire	2	8½ 9 10	
3000	Dyngwm (lead)	10	3 4	12½
150	East Daren (lead), Cardiganshire	17	65	
1280	Esgair Llee Llanfihangel-y-Croythin	4½	5 5½	
1024	Freidd Llwydd Mines (lead)	1½	3½	
1000	Gelli-rel-vin (silver-lead), Cardiganshire	1	5	
100	Goginan (lead), Cardiganshire	40	200	
100	Lisburne (lead), Cardiganshire	75	700	
1000	Llwynmalees (lead), Cardiganshire	9½	8 9	
3600	Llynvi Iron (iron)	50	50	
5000	Merllyn (lead), Flint	2½	4½ 5	4 4½ 5
1024	Montgomery (lead and copper)	6	11½ 12	
200	Nanteos (lead), Cardiganshire	34	30	
3000	Nant-y-Car (copper), near Rhayader	—	5 5½	
4934	Pennant and Craigwen (lead)	3	3	
1000	Pen-y-bank and Erglodd (lead)	4	6½	
2500	Rhoswydol and Bacheiddon (lead)	10½	—	
10000	Rhymney Iron (iron), Rhymney	50	12	
10000	Ditto New	7	3	
2000	South Wales Mining Company (lead)	1	1	
4000	Tyn-y-Worglod (slate), near Carnarvon	4	4 5	
1000	Tyllwyd (lead), Cardiganshire	2	2½	
2048	West Goginan (silver-lead), Cardiganshire	1½	1½ 2	
1020	West Nantymwyn	—	2	
	IRELAND.			
1000	Dhurode (copper)	2	5	
4000	General Mining Co. for Ireland (copper)	1½	5½	
10000	Hibernian (copper)	12½	1⅞	
20000	Mining Co. of Ireland (copper, &c.)	7	4½	
5200	Wicklow (copper), Wicklow	5	18	19
5000	Wicklow (copper and sulphur), Wicklow	3	3½ 3½	
	SCOTLAND.			
5000	Black Craig (lead), Kirkcudbrightshire	5	5	
787	Kirkcudbrightshire (lead), Kirkcud.	8½	5½	5
	MISCELLANEOUS.			
32	Black Burn, Alston, Cumberland	15	100	
32	Helvellin Mining Company, Westmoreland	10	20	
7100	Derwent (silver-lead), Durham	10	3	
1900	Keswick (lead), Portinscale, near Keswick	11	2 3	
5000	Low's Patent Copper Company	7	7	
5000	Mendip Hills (lead), near Bristol	3½	1½	
512	Old Brimpts (tin), Lydford, near Ashburton	⅛	10	12
1500	Treasult (lime quarries)	2½	3½ 4	
1024	Weston (lead), Cherbury, Shropshire	¼	¼	

	FOREIGN MINES.	Paid.	Last Price.
5000	Alten Mining Company (copper), Norway	14½	3
12000	Annotto Bay Mining Association, Jamaica	1	5
20000	Australian (copper), South Australia	4	1½
6000	Barossa Range (copper), South Australia	1⅛	⅛
10000	Brasilian Imperial (gold), Brazil	23	5½ 6
12000	Cobre Copper Company (copper), Cuba	40	35 38½
10000	Copiapo Mining Company (copper), Chili	14	5½ 6½
20000	General Mining Association (iron & coal), Nova Scotia	20	14
5000	Kinzigthal Mining Association (silver), Germany	2	⅛
12000	Liguanea and General Mining Company of Jamaica	1	1½ 1⅝
5000	Linares (lead), Spain	3	2 2½
4500	Ditto New	3	3
20000	Mexican and South American (silver), Mexico	8	1 1½
5000	National Brasilian (gold), Brazil	30	2
7000	Royal Santiago (copper), Cuba	10	7½ 8½
11000	St. John del Rey (gold), Brazil	15	13½ ⅛ 13½
43174	United Mexican (silver), Mexico	Av. 25½	4½ 4½
10000	Worthing (copper), Adelaide, South Australia	2	1½ 2 2½

LATEST CURRENT PRICES OF METALS.

LONDON, JANUARY 21, 1851.

ENGLISH IRON. *a* — *per ton.*

Bar, bolt, & square, London	£5 7 6–5 15
Nail rods	6 0–6 15
Hoops	7 0–7 15
Sheets (singles)	7 12 6–8 5
Bars, at Cardiff & Newport	4 15 0–5 0
Refined metal, Wales*	3 5 0–3 15
Do. anthracite*	3 10 0
Pigs in Wales	3 0 0–3 15
Do. do. forge	2 5 0–2 10
Do., No. 1, Clyde ... *net cash*	2 3 0–2 4
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport*	3 10 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0
Stirling's Patent } in Glasgow	2 15 0
Toughened Pigs } in Wales	3 10–3 15
Staffordshire bars, at the works	5 7 6–6 0
Rails	4 17 6–5 5
Chairs (Clyde)	4 0 0

FOREIGN IRON. *b*

Swedish	11 10–12 0
CGND	17 10 0
PSI	——
Gourieff	——
Archangel	——

FOREIGN STEEL. *c*

Swedish keg	15 0–15 10
Ditto faggot	15 0–15 5

ENGLISH COPPER. *d*

Sheets, sheathing, & bolts, *p. lb.*	0 0 9½
Tough cake ... *per ton*	84 0 0
Tile	£83 0 0
Old copper *e* ... *per lb.*	8½*d*
Yellow Metal Sheathing	8*d*

FOREIGN COPPER. *f*

South American, in bond	77 0–87 0

ENGLISH LEAD. *g*

Pig ... *per ton*	17 10 0
Sheet	18 10 0
Pipe	19 0 0
Red lead	19 0 0
White ditto	24 0 0
Patent shot	20 10 0

FOREIGN LEAD. *h*

Spanish, in bond	17 0–17 10

ENGLISH TIN. *i*

Block ... *per cwt.*	4 4–4 6
Bar	4 9 0
Refined	4 14 0

FOREIGN TIN *k*

Banca, H. C.	4 7 0–4 9
Ditto, for Export only	——
Straits	4 7 6–4 9

TIN-PLATES. *l*

IC Coke ... *per box*	1 7 6–1 8 6
IC Charcoal	1 12 6–1 13 6
IX ditto	1 18 6

SPELTER. *m*

Plates, warehoused ... *per ton*	16 2 6–16 5
Ditto, to arrive	16 0 0–16 5

ZINC. *n*

English sheet ... *per ton*	21 0–21 10
QUICKSILVER *o* ... *per lb.*	3*s.* 9*d.*

WELCH IRON.—The market has not displayed any new features this week; the principal makers continue full of orders, and a fair amount of business is doing, principally export. Orders still continue to arrive from America for rails.

In STAFFORDSHIRE IRON, the demand continues good.

SCOTCH PIG IRON.—No variation.

SWEDISH IRON.—A parcel of 70 tons has been sold at 11*l.* 12*s.* 6*d.* over ship's side, equal to 11*l.* 17*s.* 6*d.* landed; the stock is small and firmly held.

SWEDISH STEEL.—50 tons were sold in the early part of the week at 14*l.* 17*s.* 6*d.*; there are several buyers of small lots at 15*l.*—no sellers under 15*l.* 10*s.*; most of the stock is in the possession of one or two firms.

SPELTER.—During the week a small quantity changed hands at 16*l.* 5*s.*, no sellers under on the spot; a shade less might be taken for spring shipment.

COPPER.—The market remains unaltered; some fine parcels of ore and tile have arrived from Australia during the week.

TIN.—In British, the standard has been raised 5*l.* per ton; this article continues in great request at the advanced rates, for refined; common, also, is much enquired after for shipment.

In BANCA and STRAITS TIN, a very large amount has been done during the last week, chiefly on speculative account; 87*l.* has been paid for Banca, 77*l.* for uncertified Straits, and 89*l.* for certified, to arrive; 88*l.* is now demanded for Banca.

LEAD remains quiet at last week's quotations.

TIN PLATES firm at the last week's prices.

GLASGOW, JAN. 30.—The pig-iron market still remains very inanimate—the "scrip" out having been quite sufficient to supply the immediate wants, although the shipments from the Clyde ports have been nearly double what they were in January, 1850. Mixed Nos., good brands, are quoted 43*s.* per ton, cash upon immediate shipment; and No. 1, 3*d.* to 6*d.* per ton more, according to brand. Some inferior brands are offered at 41*s.* 6*d.* and 42*s.* per ton, cash.

COMPANIES PROCEEDING UNDER THE WINDING-UP ACT.

BANWEN IRON COMPANY.—At a meeting before Master Kinderaley several claims were allowed against the company, amongst which was one of 1474*l.* for rent, with several others for 20*l.* to 600*l.* Dr. Barnett, one of the directors, and for a long time chairman of the company, complained that during the investigation of the claims of the company, Mr. Brown, another director, laboured under a suspicion that he (Dr. Barnett), was privy to a concealment of the company's lease; while he (Dr. B.) had reason to believe that Mr. Brown knew something of its whereabouts. Mr. Brown stated that he had seen Mr. Harris, the secretary of the company, that morning, who said he had found the lease, and soon after, Mr. Harris coming into the court, the Master desired him to give it up to Mr. Adron, the official manager, which he did, at the same time presenting a claim for 600*l.* for three years' salary as secretary. The Master gave him leave to bring his action at common law.

UNIVERSAL SALVAGE COMPANY.—On Wednesday Mr. Ernest, the official manager, with Messrs. Fry and Holt, his solicitors, attended before Master Farrer, with reference to the final settlement of the list of contributories, which had been completed with the exception of Capt. Norcutt and Capt. Price. After considerable discussion, his Honour decided upon placing Capt. Norcutt on the list for five more shares, in addition to 45 for which he was already on; notice to be given to that gentleman to show cause within a week. Capt. Price, late of the Abbey-road, and who was stated to have been a bankrupt, and now abroad, was also placed upon the list in respect of 31 shares, in addition to a previous 45. His Honour then directed Mr. Ernest, at the next meeting to bring in a proposition, showing what calls made by the directors of the company now remain unpaid by different shareholders, so that defaulters might be called upon to pay up—proceeds to be applied in liquidation of the debts of the company. The official manager was also, as a preliminary proceeding, to rectify and make up the books of the company for this purpose, under the 24th section of the Joint Stock Companies' Winding-up Act. It appeared that the additional five shares for which Capt. Norcutt was held liable, was from his having agreed to take them by a resolution of the directors as part of his qualification shares. The 31 shares in the name of Capt. Price, were shares allotted to him, and which he had recognised as such by making payments on them in his capacity as one of the directors. Some discussion ensued with reference to the present position of the law of liability in these matters. His Honour said that the law that had been laid down on the question of allottees, in looking at all the lists of contributories, was the one that he, the Master, had originally taken. He had heard that his lordship had since his decision entertained a question as to the point of complete registration in the matter, but he had not as yet found that there was any truth in it. As reg